Undergraduate Catalog

2019-2020

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UNDERGRADUATE CATALOG

Visitors are cordially welcome at Canisius College. The administrative offices are open Monday through Friday, 8:30 a.m. until 5:00 p.m. during the academic year and 8:30 a.m. until 4:30 p.m. during the summer (except on legal or college-wide holidays). Members of the college staff are available for interviews at other times by appointments arranged in advance. The main switchboard number of the college is 716-888-2200.

Copy for this catalog was prepared as of August 1, 2019. Information, particularly timing of course offerings, is subject to change at the discretion of the college. Please consult the course-listings schedule published by the Student Records and Financial Services Center for a complete and up-to-date list of our course offerings for each semester and/or session. The college retains the right to correct errors within the copy of this catalog.

Students must complete the curriculum described in the catalog from the academic year that they matriculate at Canisius. If the curriculum changes, please consult with the department chair or program director to determine if students may choose to follow the newer curriculum. Catalogs from previous years are available on the catalog page of the Canisius website (https://www.canisius.edu/academics/academic-catalog/).

Additional information about the college and our programs and opportunities are available on the Canisius website (https://www.canisius.edu/).

Publication of The Office of Academic Affairs

Emily G. McGorry, Executive Associate in Academic Affairs
Sara R. Morris, PhD, Associate Vice President for Academic Affairs

Academic Calendar

Academic Year 2019-2020

Summer 2019

May 2019

20	Monday	Summer Classes Begin (First 5-week Session, First 6-week Session, 12-week Session) Begin Drop/Add for First 5-week Session, First 6-week Session, 12-week Session and Full-Term 100% Withdrawal Refund during Drop/Add
21	Tuesday	Last day to Drop/Add for first 5-week session
22	Wednesday	Begin 90% withdrawal refund for first 5-week session
23	Thursday	Last day to Drop/Add for first 6-week session
24	Friday	Begin 80% withdrawal refund for first 6-week session Last day to Drop/Add for 12-week and Full-term Session
25	Saturday	Begin 90% withdrawal refund for 12-week and Full-term session
27	Monday	Memorial Day - No Classes (Administrative Offices Closed)
29	Wednesday	First Student Health Warnings for Summer Session one for students not in compliance Begin 50% withdrawal refund for first 5-week session
31	Friday	Graduate Business Make-up Session for Memorial Day (this includes undergraduate business classes in the 6-week session) Begin 60% withdrawal refund for first 6-week session

June 2019

4	Tuesday	Begin 50% withdrawal refund for 12-week and Full-term session
5	Wednesday	Second Student Health warnings for Summer Session one students not in compliance Begin 25% withdrawal refund for First 5-week session
6	Thursday	Begin 40% withdrawal refund for First 6-week session
11	Tuesday	Begin 0% withdrawal refund for First 5-week session Begin 25% withdrawal refund for 12-week and Full-term Summer Session
12	Wednesday	Third Student Health Warnings for Summer Session One students not in compliance Begin 20% Withdrawal Refund for First 6-week session
18	Tuesday	Begin 0% withdrawal refund for First 6-week Session, 12-week session and Full-term session
19	Wednesday	Student Health Registration Withdrawal for Summer Session One students not in compliance
21	Friday	Last day to withdrawal from First 5-week classes
22	Saturday	First 5-week Session Classes End Online Grading Available in MyCanisius
26	Wednesday	First 5-week classes grades due
28	Friday	Last day to withdrawal from First 6-week classes
29	Saturday	First 6-week Session Classes End

July 2019

1	Monday	Classes Begin (Second 5-week Session, Second 6-week Session) Begin Drop/add for second 5-week Session and second 6-week session 100% withdrawal refund during Drop/Add
2	Tuesday	Last day to Drop/Add classes for second 5-week session

3	Wednesday	First 6-week classes grades due
4	Thursday	Independence Day - No Classes (Administrative Offices Closed)
5	Friday	Independence Day Extended Holiday - No Classes (Administrative Offices Closed) Begin 90% withdrawal refund for second 5-week session Last day to Drop/Add for second 6-week session
9	Tuesday	Begin 80% withdrawal refund for second 6-week session
10	Wednesday	First Student Health warnings for summer session two for students not in compliance
11	Thursday	Begin 50% withdrawal refund for second 5-week session
12	Friday	Graduate Business make-up session for Independence Day
15	Monday	Begin 60% withdrawal refund for second 6-week session
17	Wednesday	Second Student Health Warnings for summer session two students not in compliance Begin 25% withdrawal refund for second 5-week session
22	Monday	Begin 40% withdrawal refund for second 6-week session
23	Tuesday	Begin 0% withdrawal refund for second 5-week session
24	Wednesday	Third Student Health Warnings for summer session two for students not in compliance
29	Monday	Begin 20% withdrawal refund for second 6-week session
31	Wednesday	Student Health registrations Withdrawal for summer session two for students not in compliance

August 2019

2	Friday	Begin 0% withdrawal refund for second 6-week session Last Day to withdrawal from second 5-week classes
3	Saturday	Second 5-week Session Classes End Online Grading Available in MyCanisius
7	Wednesday	Second 5-week classes grades due
9	Friday	Last day to withdrawal from second 6-week and 12-week classes
10	Saturday	Second 6-week and 12-week session classes end
14	Wednesday	Second 6-week classes grades due Online grading turned off

Fall 2019

August 2019

19	Monday	New Faculty Orientation
21	Wednesday	Adjunct Faculty Orientation from 5pm to 7pm
26	Monday	Fall Classes Begin Counselor Education Session One Begins First Day to Apply for a course through Pass/Fail Program
30	Friday	Last day to apply for a course through Pass/Fail Program Last day to Drop/Add a Course (freshmen only)
31	Saturday	Degree Conferral for Summer Completers Last day to Drop/Add a Course (upperclassmen)

September 2019

2	Monday	Labor Day - No Classes (Administrative Offices Closed) For Anthrozoology Graduate students only: Drop/add ends at midnight
3	Tuesday	Withdrawal from courses begins (all divisions) Begin 90% withdrawal refund (full-term classes) Begin 50% withdrawal refund for Educational Technologies and Professional Studies session one Deadline for submitting Core Curriculum proposals for inclusion in Spring 2020 Schedule
4	Wednesday	First Student Health Warnings for students not in compliance Begin 30% withdrawal refund for Counselor Education session one
6	Friday	Spring 2020 Scheduling begins in CourseLeaf/CLSS
10	Tuesday	Begin 50% withdrawal refund (full-term classes) Begin 20% withdrawal refund for Educational Technologies and Professional Studies session one
11	Wednesday	Second Student Health Warning for students not in compliance Begin no withdrawal refund for Counselor Education session one

16	Monday	Deadline for Submitting New Courses for Spring 2020
17	Tuesday	50% withdrawal refund (full-term classes) Begin no withdrawal refund for Educational Technologies and Professional Studies session one
18	Wednesday	Third Student Health warnings for students not in compliance
23	Monday	All Spring 2020 Schedules are due in CourseLeaf/CLSS
24	Tuesday	Begin 25% withdrawal refund (full-term classes)
25	Wednesday	Student Progress Report Submission By Faculty Begins Student Health Registration Withdrawal for Students not in Compliance
27	Friday	Counselor Education Session One Ends
30	Monday	Counselor Education Session Two Begins Spring 2020 Advisement Guide Due

October 2019

1	Tuesday	25% withdrawal refund (full-term classes)
2	Wednesday	Mass of the Holy Spirit (Please note that any classes that normally meet on a Monday, Wednesday, and Friday pattern do not meet on this day. Classes that normally meet on Wednesday only or on a Monday and Wednesday pattern will still meet on this day.) Grades Due for Counselor Education Session One Student Progress Report Submission by Faculty Ends
3	Thursday	Email to Designated Students Regarding Student Progress Reports Student Progress Report Meetings With Advisors Begin
9	Wednesday	Begin 30% withdrawal refund for Counselor Education session two
11	Friday	Spring 2020 Schedule and Advisement Guide Online
14	Monday	Fall Holiday - No Classes (Administrative Offices Closed)
15	Tuesday	Fall Holiday - No Classes (Administrative Offices Open) 25% withdrawal refund (full-term classes)
16	Wednesday	Begin no withdrawal refund for Counselor Education Session two
18	Friday	Student Progress Report Meetings with Advisors End
19	Saturday	Educational Technologies and Professional Studies session one ends
21	Monday	Educational Technologies and Professional Studies session two begins Graduate Registration for Spring 2020 begins at 8:30am Anthrozoology Graduate Registration for Students with 18.0 or more earned credits
22	Tuesday	Begin no withdrawal refund (full-term classes) Undergraduate registration begins for students with 84.0 or more earned credit hours at 7:30am
23	Wednesday	Grades due for Educational Technologies and Professional Studies session one
26	Saturday	Drop/Add ends for Educational Technologies and Professional Studies session two
28	Monday	Begin 50% withdrawal refund for Educational Technologies and Professional Studies session two Anthrozoology graduate registration for students with less than 18.0 earned credits Faculty Deficiency Reporting Submissions Begins
29	Tuesday	Undergraduate Registration begins for students with 54.0-83.0 earned credit hours at 7:30am
30	Wednesday	First Student Health warnings for students not in compliance in Educational Technologies and Professional Studies session two

November 2019

1	Friday	Counselor Education Session Two Ends
4	Monday	Begin 20% Withdrawal Refund for Educational Technologies & Professional Studies Session Two Anthrozoology Graduate Registration for New Students (0 credits) Counselor Education Session Three Begins
5	Tuesday	Undergraduate Registration for students with 24.0-53.9 Earned Credits at 7:30am
6	Wednesday	Grades Due for Counselor Education Session Two Second Student Health Warning for Students not in compliance in Educational Technologies & Professional Studies Session Two Faculty Deficiency Reporting Submissions Ends
7	Thursday	Deficiency Email Sent to Designated Students

11	Monday	Veteran's Day (Classes in Session) Begin No Withdrawal Refund for Educational Technologies & Professional Studies Session Two
12	Tuesday	Undergraduate Registration for students with 0-23.9 earned credits at 7:30am
13	Wednesday	Begin 30% withdrawal refund for Counselor Education session three Third Student Health Warning for students not in compliance in Educational Technologies & Professional Studies Session Two
15	Friday	Last Day to Withdraw from Classes
27	Wednesday	Thanksgiving Holiday - No Classes (Administrative Offices Open) Begin No Withdrawal refund for Counselor Education session three Student Health Registration withdrawal for students no in compliance in Educational Technologies & Professional Studies session two
28	Thursday	Thanksgiving Holiday - No Classes (Administrative Offices Closed)
29	Friday	Thanksgiving Holiday - No Classes (Administrative Offices Closed)
30	Saturday	Thanksgiving Holiday - No Classes (Administrative Offices Closed)

December 2019

2	Monday	First Day to Withdraw from a course through Pass/Fail Program
5	Thursday	Undergraduate Classes End
6	Friday	Undergraduate Reading Day Last Day to withdraw from a course through Pass/Fail Program
7	Saturday	Graduate Classes End
9	Monday	Final Exams Begin Final Grade Entry Available in MyCanisius
13	Friday	Undergraduate Final Exams End Counselor Education Session Three Ends
14	Saturday	Graduate Exams End Educational Technologies & Professional Studies Session Two Ends
16	Monday	Summer & Fall 2020 Scheduling begin in CourseLeaf/CLSS
18	Wednesday	Grades Due (For all Divisions) by 9:00am
24	Tuesday	Holiday Shutdown Begins (All Administrative Offices Closed until January 2)

Spring 2020

January 2020

2	Thursday	Administrative Offices Reopen
13	Monday	Spring Classes Begins (All Divisions) Counselor Education Session One Begins First Day To Apply For a Course Through Pass/Fail Program
17	Friday	Last Day To Apply For a Course Through Pass/Fail Program
18	Saturday	Last Day To Drop/Add a Course (All Divisions)
20	Monday	Martin Luther King Day - No Classes (Administrative Offices Closed) For Anthrozoology Graduate Students Only: Drop/Add Ends At Midnight
21	Tuesday	Withdrawal from courses begins (all divisions) Begin 90% withdrawal refund (full-term classes) Begin 50% Withdrawal Refund For Educational Technologies and Professional Studies Session One
22	Wednesday	First Student Health Warning For Students Not In Compliance Begin 30% withdrawal refund for Counselor Education session One
27	Monday	All Summer and Fall 2020 Schedule Due in CourseLeaf/CLSS Fall 2020 Advisement Guide Due
28	Tuesday	Begin 50% withdrawal refund (full-term classes) Begin 20% Withdrawal Refund For Educational Technologies and Professional Studies Session One
29	Wednesday	Second Student Health Warning For Students Not In Compliance Begin No withdrawal refund for Counselor Education session One

February 2020

1	Saturday	Degree Conferral For Fall Completers
4	Tuesday	50% withdrawal refund (full-term classes) Begin No Withdrawal Refund For Educational Technologies and Professional Studies Session One
5	Wednesday	Third Student Health Warning For Students Not In Compliance
10	Monday	Summer and Fall 2020 Schedules and Fall 2020 Advisement Guide Online
11	Tuesday	Begin 25% withdrawal refund (full-term classes)

12	Wednesday	Student Progress Report Submission By Faculty Begins Student Health Registration Withdrawal For Students Not In Compliance Summer 2020 Registration Begins (All Students)
14	Friday	Counselor Education Session One Ends
17	Monday	Presidents' Day Holiday - No Classes (Administrative Offices Closed) Counselor Education Session Two Begins
18	Tuesday	Presidents' Day Holiday - No Classes (Administrative Offices Open) 25% Withdrawal Refund (full-term classes)
19	Wednesday	Grades Due for Counselor Education Session One Student Progress Report Submission By Faculty Ends
20	Thursday	Email to Designated Students Regarding Student Progress Reports
21	Friday	Student Progress Report Meetings With Advisors Begin
24	Monday	Graduate Registration for Fall 2020 begins at 8:30am
25	Tuesday	25% withdrawal refund (full-term classes) Undergraduate Registration for students with 72.0 or more earned credits at 7:30am
26	Wednesday	Begin 30% withdrawal refund for Counselor Education session Two

March 2020

3	Tuesday	25% withdrawal refund (full-term classes) Undergraduate Registration for students with 42.0-71.9 earned credits at 7:30am
4	Wednesday	Begin No withdrawal refund for Counselor Education session Two
6	Friday	Student Progress Report Meetings With Advisors End
7	Saturday	Educational Technologies & Professional Studies Session One Ends
9	Monday	Educational Technologies & Professional Studies Session Two Begins
10	Tuesday	Begin No Withdrawal Refund (full-term classes) Undergraduate Registration for students with 0-41.9 earned credits at 7:30am
11	Wednesday	Grades Due For Educational Technologies and Professional Studies Session One Faculty Deficiency Reporting Submission Begins
14	Saturday	Drop/Add Ends for Educational Technologies and Professional Studies Session Two
16	Monday	Spring Recess Begins - No Classes Except Educational Technologies (Administrative Offices Open) Begin 50% Withdrawal Refund for Educational Technologies and Professional Studies Session Two
18	Wednesday	First Student Health Warning For Students Not In Compliance In Educational Technologies and Professional Studies Session Two Faculty Deficiency Reporting Submission Ends
19	Thursday	Deficiency Email Sent To Designated Students
23	Monday	Classes Resume Begin 20% Withdrawal Refund For Educational Technologies and Professional Studies Session Two Graduate Registration Begins for Fall 2020 Anthrozoology Graduate Registration For Students With more than 18.0 Earned Credit Hours
24	Tuesday	Undergraduate Registration for students with 72.0 Or More Earned Credits at 7:30am
25	Wednesday	Second Student Health Warning For Students Not In Compliance In Educational Technologies and Professional Studies Session Two
27	Friday	Counselor Education Session Two Ends
30	Monday	Begin No Withdrawal Refund For Educational Technologies and Professional Studies Session Two Counselor Education Session Three Begins Anthrozoology Graduate Registration For Students With 1.0-18.0 Earned Credit Hours
31	Tuesday	Undergraduate Registration for students with 42.0-71.9 Earned Credits at 7:30am

April 2020

1	Wednesday	Grades Due for Counselor Education Session Two Third Student Health Warning For Students Not In Compliance In Educational Technologies and Professional Studies Session Two
6	Monday	Anthrozoology Graduate Registration For New Students (0 Credits)
7	Tuesday	Undergraduate Registration for students with 0-41.9 Earned Credits at 7:30am

8	Wednesday	Easter Holiday - No Classes (Administrative Offices Open) Begin 30% withdrawal refund for Counselor Education Session Three Student Health Registration Withdrawal For Students Not In Compliance In Educational Technologies and Professional Studies Session Two
9	Thursday	Easter Holiday - No Classes (Administrative Offices Open)
10	Friday	Easter Holiday - No Classes (Administrative Offices Closed) Last Day To Withdraw From Classes
13	Monday	Classes Resume
15 (Tentative)	Wednesday	Ignatian Scholarship Day (Please note that any classes that normally meet on a Monday, Wednesday, and Friday pattern do not meet on this day. Classes that normally meet on Wednesday only or on a Monday and Wednesday pattern will still meet on this day) Begin No withdrawal refund for Counselor Education session Three
27	Monday	First Day to Withdraw From a Course Through Pass/Fail Program
30	Thursday	Undergraduate Classes End

May 2020

1	Friday	Undergraduate Reading Day Counselor Education Session Three Ends Last Day to Withdraw From a Course Through Pass/Fail Program
2	Saturday	Graduate Classes End Educational Technologies & Professional Studies Session Two Ends
4	Monday	Final Exams Begin Final Grade Entry Available In MyCanisius
8	Friday	Undergraduate Final Exams End
9	Saturday	Graduate Final Exams End
13	Wednesday	Grades Due (All Divisions) by 9:00am Graduate Commencement Exercises
15	Friday	Spring Honors Convocation Baccalaureate Mass
16	Saturday	Undergraduate Commencement Exercises

Academic Year 2020-2021

Summer 2020

May 2020

18	Monday	Summer Classes Begin (First 5-week Session, First 6-week Session, 12-week Session) Begin Drop/Add for First 5-week Session, First 6-week Session, 12-week Session and Full-Term 100% Withdrawal Refund during Drop/Add
19	Tuesday	Last day to Drop/Add for first 5-week session
20	Wednesday	Begin 90% withdrawal refund for first 5-week session
21	Thursday	Last day to Drop/Add for first 6-week session
22	Friday	Begin 80% withdrawal refund for first 6-week session Last day to Drop/Add for 12-week and Full-term Session
23	Saturday	Begin 90% withdrawal refund for 12-week and Full-term session
25	Monday	Memorial Day - No Classes (Administrative Offices Closed)
27	Wednesday	First Student Health Warnings for Summer Session one for students not in compliance Begin 50% withdrawal refund for first 5-week session
29	Friday	Graduate Business Make-up Session for Memorial Day (this includes undergraduate business classes in the 6-week session) Begin 60% withdrawal refund for first 6-week session

June 2020

2	Tuesday	Begin 50% withdrawal refund for 12-week and Full-term session
3	Wednesday	Second Student Health warnings for Summer Session one students not in compliance Begin 25% withdrawal refund for First 5-week session
4	Thursday	Begin 40% withdrawal refund for First 6-week session
9	Tuesday	Begin 0% withdrawal refund for First 5-week session Begin 25% withdrawal refund for 12-week and Full-term Summer Session
10	Wednesday	Third Student Health Warnings for Summer Session One students not in compliance Begin 20% Withdrawal Refund for First 6-week session
16	Tuesday	Begin 0% withdrawal refund for First 6-week Session, 12-week session and Full-term session

17	Wednesday	Student Health Registration Withdrawal for Summer Session One students not in compliance
19	Friday	Last day to withdrawal from First 5-week classes
20	Saturday	First 5-week Session Classes End Online Grading Available in MyCanisius
24	Wednesday	First 5-week classes grades due
26	Friday	Last day to withdrawal from First 6-week classes
27	Saturday	First 6-week Session Classes End
29	Monday	Classes Begin (Second 5-week Session, Second 6-week Session) Begin Drop/add for second 5-week Session and second 6-week session 100% withdrawal refund during Drop/Add
30	Tuesday	Last day to Drop/Add classes for second 5-week session

July 2020

1	Wednesday	First 6-week classes grades due
3	Friday	Independence Day Holiday Extension-No Classes (Administrative Offices Closed) Begin 90% withdrawal refund for second 5-week session Last day to Drop/Add for second 6-week session
7	Tuesday	Begin 80% withdrawal refund for second 6-week session
8	Wednesday	First Student Health warnings for summer session two for students not in compliance
9	Thursday	Begin 50% withdrawal refund for second 5-week session
13	Monday	Begin 60% withdrawal refund for second 6-week session
15	Wednesday	Second Student Health Warnings for summer session two students not in compliance Begin 25% withdrawal refund for second 5-week session
20	Monday	Begin 40% withdrawal refund for second 6-week session
21	Tuesday	Begin 0% withdrawal refund for second 5-week session
22	Wednesday	Third Student Health Warnings for summer session two for students not in compliance
27	Monday	Begin 20% withdrawal refund for second 6-week session
29	Wednesday	Student Health registrations Withdrawal for summer session two for students not in compliance
31	Friday	Begin 0% withdrawal refund for second 6-week session Last Day to withdrawal from second 5-week classes

August 2020

1	Saturday	Second 5-week Session Classes End Online Grading Available in MyCanisius
5	Wednesday	Second 5-week classes grades due
7	Friday	Last day to withdrawal from second 6-week and 12-week classes
8	Saturday	Second 6-week and 12-week Session Classes End
12	Wednesday	Online grading turned off

Fall 2020

August 2020

24	Monday	New Faculty Orientation
26	Wednesday	Adjunct Faculty Orientation (tentative date)
31	Monday	Fall Classes Begin Degree Conferral for Summer Completers Counselor Education Session One Begins First Day to Apply for a course through Pass/Fail Program Drop/Add begins 100% Refund for Withdrawal from Courses

September 2020

4	Friday	Last day to apply for a course through Pass/Fail Program Last day to Drop/Add a Course (freshmen only)
5	Saturday	Last day to Drop/Add a Course (upperclassmen)
7	Monday	Labor Day - No Classes (Administrative Offices Closed) For Anthrozoology Graduate students only: Drop/add ends at midnight
8	Tuesday	Withdrawal from courses begins (all divisions) Begin 90% withdrawal refund (full-term classes) Begin 50% withdrawal refund for Educational Technologies and Professional Studies session one
9	Wednesday	First Student Health Warnings for students not in compliance Begin 30% withdrawal refund for Counselor Education session one

15	Tuesday	Begin 50% withdrawal refund (full-term classes) Begin 20% withdrawal refund for Educational Technologies and Professional Studies session one
16	Wednesday	Mass of the Holy Spirit (Please note that any classes that normally meet on a Monday, Wednesday, and Friday pattern do not meet on this day. Classes that normally meet on Wednesday only or on a Monday and Wednesday pattern will still meet on this day.) (TENTATIVE DATE)
22	Tuesday	50% withdrawal refund (full-term classes) Begin no withdrawal refund for Educational Technologies and Professional Studies session one
23	Wednesday	Third Student Health warnings for students not in compliance
29	Tuesday	Begin 25% withdrawal refund (full-term classes)
30	Wednesday	Student Progress Report Submission By Faculty Begins Student Health Registration Withdrawal for Students not in Compliance

October 2020

2	Friday	Counselor Education Session One Ends
5	Monday	Counselor Education Session Two Begins
7	Wednesday	Grades Due for Counselor Education Session One Student Progress Report Submission by Faculty Ends
8	Thursday	Email to Designated Students Regarding Student Progress Reports Student Progress Report Meetings With Advisors Begin
12	Monday	Columbus Day - No Classes (Administrative Offices Closed)
13	Tuesday	Columbus Day - No Classes (Administrative Offices Open)
14	Wednesday	Begin 30% withdrawal refund for Counselor Education session two
16	Friday	Spring 2021 Schedule and Advisement Guide Online
20	Tuesday	25% withdrawal refund (full-term classes)
21	Wednesday	Begin no withdrawal refund for Counselor Education Session two
23	Friday	Student Progress Report Meetings with Advisors Ends
24	Saturday	Educational Technologies and Professional Studies session one ends
26	Monday	Educational Technologies and Professional Studies session two begins Graduate Registration for Spring 2021 begins at 8:30am Anthrozoology Graduate Registration for Students with 18.0 or more earned credits
27	Tuesday	Begin no withdrawal refund (full-term classes) Undergraduate registration begins for students with 84.0 or more earned credit hours at 7:30am
28	Wednesday	Grades due for Educational Technologies and Professional Studies session one
31	Saturday	Drop/Add ends for Educational Technologies and Professional Studies session two

November 2020

2	Monday	Begin 50% withdrawal refund for Educational Technologies and Professional Studies session two Anthrozoology graduate registration for students with less than 18.0 earned credits Faculty Deficiency Reporting Submissions Begins
3	Tuesday	Undergraduate Registration begins for students with 54.0-83.0 earned credit hours at 7:30am
4	Wednesday	First Student Health warnings for students not in compliance in Educational Technologies and Professional Studies session two
6	Friday	Counselor Education Session Two Ends
9	Monday	Begin 20% Withdrawal Refund for Educational Technologies & Professional Studies Session Two Counselor Education Session Three Begins Anthrozoology Graduate Registration for New Students (0 credits)
10	Tuesday	Undergraduate Registration for students with 24.0-53.9 Earned Credits at 7:30am
11	Wednesday	Veteran's Day (Classes in Session) Grades Due for Counselor Education Session Two Second Student Health Warning for Students not in compliance in Educational Technologies & Professional Studies Session Two Faculty Deficiency Reporting Submissions Ends
12	Thursday	Deficiency Email Sent to Designated Students

16	Monday	Begin No Withdrawal Refund for Educational Technologies & Professional Studies Session Two
17	Tuesday	Undergraduate Registration for students with 0-23.9 earned credits at 7:30am
18	Wednesday	Begin 30% withdrawal refund for Counselor Education session three Third Student Health Warning for students not in compliance in Educational Technologies & Professional Studies Session Two
20	Friday	Last Day to Withdraw from Classes
25	Wednesday	Thanksgiving Holiday - No Classes (Administrative Offices Open) Begin No Withdrawal refund for Counselor Education session three Student Health Registration withdrawal for students not in compliance in Educational Technologies & Professional Studies session two
26	Thursday	Thanksgiving Holiday- No Classes (Administrative Offices Closed)
27	Friday	Thanksgiving Holiday- No Classes (Administrative Offices Closed)
30	Monday	Classes Resume First Day to Withdraw from a course through Pass/Fail Program

December 2020

10	Thursday	Undergraduate Classes End
11	Friday	Undergraduate Reading Day (No Classes) Last Day to withdraw from a course through Pass/Fail Program
12	Saturday	Graduate Classes End Final Exams Begin Final Grade Entry Available in MyCanisius
18	Friday	Undergraduate Final Exams End Counselor Education Session Three Ends
19	Saturday	Graduate Exams End Educational Technologies & Professional Studies Session Two Ends
21	Monday	Grades Due (For all Divisions) by 12 pm
24	Thursday	Holiday Shutdown Begins (All Administrative Offices Closed until January 4)

Spring 2021

January 2021

4	Monday	Administrative Offices Reopen
18	Monday	Martin Luther King Jr. Day - No Classes (Administrative Offices Closed)
19	Tuesday	Spring Classes Begin (All Divisions) Counselor Education Session One Begins First Day To Apply For a Course Through Pass/Fail Program
22	Friday	Last Day To Apply For a Course Through Pass/Fail Program
23	Saturday	Last Day To Drop/Add a Course (All Divisions)
25	Monday	For Anthrozoology Graduate Students Only: Drop/Add Ends At Midnight
26	Tuesday	Withdrawal from courses begins (all divisions) Begin 90% withdrawal refund (full-term classes) Begin 50% Withdrawal Refund For Educational Technologies and Professional Studies Session One
27	Wednesday	First Student Health Warning For Students Not In Compliance Begin 30% withdrawal refund for Counselor Education Session One

February 2021

1	Monday	Degree Conferral For Fall Completers
2	Tuesday	Begin 50% withdrawal refund (full-term classes) Begin 20% Withdrawal Refund For Educational Technologies and Professional Studies Session One
3	Wednesday	Second Student Health Warning For Students Not In Compliance Begin No withdrawal Refund for Counselor Education Session One
9	Tuesday	50% withdrawal refund (full-term classes) Begin No Withdrawal Refund For Educational Technologies and Professional Studies Session One
10	Wednesday	Third Student Health Warning For Students Not In Compliance
15	Monday	Presidents' Day Holiday - No Classes (Administrative Offices Closed)
16	Tuesday	Presidents' Day Holiday - No Classes (Administrative Offices Open) Begin 25% withdrawal refund (full-term classes)
17	Wednesday	Student Progress Report Submission By Faculty Begins Student Health Registration Withdrawal For Students Not In Compliance
19	Friday	Counselor Education Session One Ends
22	Monday	Counselor Education Session Two Begins
23	Tuesday	25% Withdrawal Refund (full-term classes)

24	Wednesday	Grades Due for Counselor Education Session One Student Progress Report Submission By Faculty Ends
25	Thursday	Email to Designated Students Regarding Student Progress Reports
26	Friday	Student Progress Report Meetings with Advisors Begins

March 2021

2	Tuesday	25% withdrawal refund (full-term classes)
3	Wednesday	Begin 30% withdrawal refund for Counselor Education session Two
5	Friday	Summer and Fall 2021 Schedules and Fall 2021 Advisement Guide Online Student Progress Report Meetings With Advisors Ends
8	Monday	Summer Registration Begins (All Students)
10	Wednesday	Begin No withdrawal refund for Counselor Education Session Two
13	Saturday	Educational Technologies & Professional Studies Session One Ends
15	Monday	Graduate Registration Begins for Fall 2021 Anthrozoology Graduate Registration For Students With more than 18.0 Earned Credit Hours Educational Technologies & Professional Studies Session Two Begins
16	Tuesday	Undergraduate Registration for Students with 72.0 Or More Earned Credits at 7:30am Begin No Withdrawal Refund (full-term classes)
17	Wednesday	Grades Due For Educational Technologies and Professional Studies Session One Faculty Deficiency Reporting Submission Begins
20	Saturday	Drop/Add Ends for Educational Technologies and Professional Studies Session Two
22	Monday	Anthrozoology Graduate Registration For Students With 1.0-18.0 Earned Credit Hours Begin 50% Withdrawal Refund For Educational Technologies and Professional Studies Session Two
23	Tuesday	Undergraduate Registration for students with 42.0-71.9 Earned Credits at 7:30am
24	Wednesday	First Student Health Warning for Students not in Compliance in Educational Technologies and Professional Studies Session Two Faculty Deficiency Reporting Submission Ends
25	Thursday	Deficiency Email Sent To Designated Students
26	Friday	Counselor Education Session Two Ends
29	Monday	Counselor Education Session Three Begins Anthrozoology Graduate Registration For New Students (0 Credits) Begin 20% Withdrawal Refund For Educational Technologies and Professional Studies Session Two
30	Tuesday	Undergraduate Registration for students with 0-41.9 Earned Credits at 7:30am
31	Wednesday	Easter Holiday - No Classes (Administrative Offices Open) Grades Due for Counselor Education Session Two Second Student Health Warning For Students Not In Compliance in Educational Technologies and Professional Studies Session Two

April 2021

1	Thursday	Easter Holiday - No Classes (Administrative Offices Open)
2	Friday	Easter Holiday - No Classes (Administrative Offices Closed)
5	Monday	Spring Recess Begins - No Classes Except Educational Technologies (Administrative Offices Open) Begin No Withdrawal Refund For Educational Technologies and Professional Studies Session Two Begin 30% withdrawal refund for Counselor Education Session Three
7	Wednesday	Third Student Health Warning For Students Not In Compliance In Educational Technologies and Professional Studies Session Two
12	Monday	Classes resume
14	Wednesday	Ignatian Scholarship Day (Please note that any classes that normally meet on a Monday, Wednesday, and Friday pattern do not meet on this day. Classes that normally meet on Wednesday only or on a Monday and Wednesday pattern will still meet on this day) TENTATIVE Begin No Withdrawal Refund for Counselor Education Session Three Student Health Registration Withdrawal For Students Not In Compliance In Educational Technologies and Professional Studies Session Two
23	Friday	Last Day to Withdraw from Classes

May 2021

3	Monday	First Day to Withdraw From a Course Through Pass/Fail Program

6	Thursday	Undergraduate Classes End
7	Friday	Undergraduate Reading Day (No Classes) Counselor Education Session Three Ends Last Day to Withdraw From a Course Through Pass/Fail Program
8	Saturday	Graduate Classes End
10	Monday	Final Exams Begin Final Grade Entry Available in MyCanisius
15	Saturday	Undergraduate Final Exams End (Tentative) Graduate Final Exams End Educational Technologies & Professional Studies Session Two Ends
19	Wednesday	Grades Due (All Divisions) by 9:00am Graduate Commencement Exercises
21	Friday	Spring Honors Convocation Baccalaureate Mass
22	Saturday	Undergraduate Commencement

About Canisius

About Canisius

Consistently ranked among the top regional institutions in the Northeast, Canisius is the premier private university in Western New York and one of 27 Jesuit, Catholic universities in the nation. Founded in 1870 by German Jesuits, Canisius is named for St. Peter Canisius, a renowned Dutch educator and one of the original members of the Society of Jesus.

A masters-level, comprehensive university, Canisius promotes the Jesuit principles of academic excellence, service and leadership through a broad range of learning experiences and a distinct core curriculum that is grounded in the liberal arts.

Buffalo has been home to Canisius for 150 years. Located in the Hamlin Park district, a historic and conveniently-located residential neighborhood in north-central Buffalo, the college campus spans 72 acres and is comprised of 15 academic and administrative buildings, three athletic complexes and five residence halls.

Over the last 25 years, more than $178 million has been invested to create several signature state-of-the-art living and learning environments - including the newly renovated Science Hall (https://www.canisius.edu/about/campus/signature-facilities/), the Montante Cultural Center (https://www.canisius.edu/about/campus/signature-facilities/), Nelson D. Civello '67 Family Financial Markets Lab (https://www.canisius.edu/about/campus/signature-facilities/), the Institute for Autism Research (https://www.canisius.edu/academics/our-schools/school-education-human-services/institute-autism-research/), the ESPN3 Studio (https://www.canisius.edu/about/campus/signature-facilities/), HARBORCENTER (https://www.canisius.edu/about/campus/signature-facilities/) and Dugan Hall (https://www.canisius.edu/student-experience/student-affairs/student-life-and-housing/student-housing/upperclassmen-housing-0/), our newest residence hall.

Our Mission

Canisius College, a Catholic and Jesuit university, offers outstanding undergraduate, graduate and professional programs distinguished by transformative learning experiences that engage students in the classroom and beyond. We foster in our students a commitment to excellence, service and leadership in a global society.

At the Core of Our Mission

Catholic & Jesuit

Canisius is an open, welcoming university where our Catholic, Jesuit mission and identity are vitally present and operative. It is rooted in the Catholic intellectual tradition's unity of knowledge and the dialogue of faith and reason. Founded by the Society of Jesus as a manifestation of its charism, Canisius espouses the Jesuit principles of human excellence, care for the whole person, social justice, and interreligious dialogue. Jesuit spirituality calls us to seek God in all things and Jesuit education aims to form students who become men and women for and with others.

Transformative Learning & Student Engagement

Steeped in Jesuit ideals, our undergraduate and graduate academic programs are distinguished by academic excellence, student-faculty interaction, and a variety of experiential learning opportunities that engage students and transform mind and spirit. Our undergraduate core curriculum enriches students' academic pursuits and delivers a strong foundation in liberal arts, critical thinking, and diversity. Graduate and professional programs promote the application of theory to practice.

Service & Leadership

Benefiting from academically-rich, values-based experiences in their interactions with faculty, staff, and community members, students develop their abilities to lead and inspire others. At Canisius, students practice these leadership skills in the classroom and through co-curricular activities in ways that animate our Jesuit values to serve others and benefit our world.

Our Values

Canisius College is committed to the following values that emerge from our Catholic, Jesuit mission to guide all of our decisions and actions:

- *Cura personalis*, care and respect for the whole person, and a holistic approach to education
- A dedication to the pursuit of *magis*, excellence, service, and innovation
- Principled leadership and personal accountability
- An individual and institutional responsibility to work for social justice and transform suffering and injustice in the world
- A deep respect for the natural world, and a commitment to its responsible stewardship.

Our Vision

Canisius will be the leading educational choice for those who seek innovative learning opportunities rooted in our Jesuit mission and values.

Canisius seeks to:

- Be a vibrant and progressive university committed above all else to academic excellence and the authentic search for truth.
- Embrace its Catholic, Jesuit identity as its defining characteristic and be committed to enhancing and enriching that identity.

- Recruit faculty with outstanding credentials and foster academic excellence through extraordinary teaching and scholarship.
- Embrace its urban roots in Buffalo, New York and become more engaged with the world around it by addressing issues and challenges in the neighborhood, city, region, nation, and world.
- Engage alumni and friends and draw them into a deeper lifelong relationship with the university.
- Be committed to quality and continuous improvement in everything that we do.

Academic Programs

Canisius has been preparing students for meaningful careers and lives for almost 150 years. We do it through exceptional teaching, extraordinary opportunities for hands-on learning, and through a supportive community that is invested in students and their goals. Canisius is highly accredited and recognized for excellence in teaching, curriculum and outcomes in each of its three schools: College of Arts & Sciences (https://www.canisius.edu/academics/our-schools/college-arts-sciences/), School of Education & Human Services (https://www.canisius.edu/academics/our-schools/school-education-human-services/) and the Richard J. Wehle School of Business (https://www.canisius.edu/academics/our-schools/richard-j-wehle-school-business/).

Canisius offers students undergraduate curricula leading to the degrees of Bachelor of Arts (BA), Bachelor of Science (BS) and Associate of Arts (AA) in more than 100 majors (http://catalog.canisius.edu/undergraduate/majors/), minors (http://catalog.canisius.edu/undergraduate/minors/), and special programs (http://catalog.canisius.edu/undergraduate/special-programs/) to create a path that is uniquely suited to their interests and career goals. Graduate students can select from 35 outstanding master's and certificate programs (http://catalog.canisius.edu/graduate/programs/), including an array of degrees offered fully online. (https://www.canisius.edu/online/courses-programs/)

Faculty

Regardless of the program of study, students will find experienced faculty who are committed to providing a challenging yet supportive environment to help them reach their goals. The college seeks faculty members known to be creative and energetic teachers who also seek to engage their students in their research and scholarship. With modest class size the norm (the student-faculty ratio is 11:1), interaction between students and faculty makes for an easy and natural learning and working environment, in which professors take a personal interest in their students. Moreover, 98 percent of faculty at Canisius hold a PhD or other terminal degree.

Accreditation

Canisius College is accredited by numerous national organizations. These accreditations serve as testament to the excellent quality of a Canisius education.

Canisius is an accredited member of the Middle States Commission on Higher Education[1]. The college's Middle States accreditation was reaffirmed in 2015.

All of the college's programs are registered by the Regents of the University of the State of New York through the State Education Department[2].

The Richard J. Wehle School of Business is the largest private institution in Western New York accredited by the Association to Advance Collegiate Schools of Business (AACSB International)[3]. The college has held this distinction of excellence since 1977. AACSB is earned by the best business schools in the world, and only five percent of business schools worldwide meet the rigorous standards of AACSB International Accreditation.

The chemistry major is accredited by the American Chemical Society[4].

The programs of the School of Education and Human Services designed to prepare students for school-based careers are accredited by the Council for the Accreditation of Educator Preparation[5]. The agency praised the college for "displaying the high quality necessary to be granted national accreditation" and noted its programs "met rigorous standards set forth by the education community."

The Graduate Programs in Counseling are accredited by the Council for the Accreditation of Counseling and Related Educational Programs.[6]

1 Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104-2680. Telephone: 267-284-5000.

2 University of the State of New York, State Education Department, Board of Regents, Room 110EB, Albany, NY 12234. Telephone: 518-474-5889.

3 Association to Advance Collegiate Schools of Business-International, 777 South Harbour Island Blvd, Suite 750, Tampa, FL 33602-5730. Telephone: 813-769-6500.

4 American Chemical Society, 1155 Sixteenth St, NW, Washington, DC 20036. Telephone: 800-227-5558 (US only) 202-872-4600.

5 Council for the Accreditation of Educator Preparation, 1140 19th St NW, Suite 400 Washington, DC 20036. Telephone: 202-223-0077.

6 Council for Accreditation of Counseling and Related Educational Programs, 1001 North Fairfax Street, Suite 510, Alexandria VA 22314. Telephone: 703-535-5990.

The Griff Center for Academic Engagement

The Griff Center for Academic Engagement (https://www.canisius.edu/student-experience/student-support-services/griff-center/)provides comprehensive programs, services, and resources to support student academic and career success and a transformative learning experience grounded in our Catholic, Jesuit mission. The Griff Center is a hub for academic advisement, career advisement (https://www.canisius.edu/student-experience/student-support-services/griff-center/career-services/), accessibility support (https://www.canisius.edu/student-experience/student-support-services/griff-center/accessibility-support/), and has staff ready to assist students to become successful lifelong learners.

Campus Ministry

The Office of Campus Ministry (https://www.canisius.edu/faith-and-service/campus-ministry/) is responsible for the spiritual life on campus and espouses the Jesuit principles of human excellence, care for the whole person and social justice. And while Canisius is a school steeped in Catholic, Jesuit tradition, we welcome, respect and encourage interreligious dialogue from people of all faith traditions.

Through the Campus Ministry Office, students explore the depths of the human perspective through the lens of Ignatian and Catholic spirituality, as well as other religious denominations. This is accomplished through retreats (https://www.canisius.edu/faith-and-service/campus-ministry/retreats/), service immersion trips (https://www.canisius.edu/faith-and-service/campus-ministry/service-immersion-experiences/) and community service (https://www.canisius.edu/faith-and-service/campus-ministry/local-community-service/).

The Andrew L. Bouwhuis (ALB) Library

The quality of any educational institution is determined largely by the proficiency of its faculty and the excellence of the information resources available to support the curriculum.

Canisius students have at their disposal an excellent library collection to support student research. The library also subscribes to thousands of full text electronic journals, and hundreds of article databases and print journals. Electronic resources can be accessed from computer labs and residence halls on campus and remotely from any connected device. A substantial complement of equipment, including computers, printers, cameras (digital still or video), projectors, headphones (with or without microphones); e-book readers and SmartBoards are also available to students.

The library is outfitted with a variety of study and workspaces; a Curriculum Materials Center for K-12 teacher training; group workrooms; audio-visual areas to practice presentations; and a Tim Hortons coffee shop.

The Rev. J. Clayton Murray, S.J. Archives & Special Collections, located in the library, houses information related to the history of Canisius College. It also holds unique materials with strengths in civil rights and social justice, Catholicism, philosophy, local history, and rare books dating to the 15th century. Visitors and researchers are welcome.

Computer Facilities

Wireless networking is available across campus and there are several Internet Plazas where students can check their electronic mail, access the web or utilize the extensive online research databases provided by the Andrew L. Bouwhuis Library. Additionally, residence halls are wired for satellite TV and Internet access.

Instructional computing facilities include over 300 personal computers, as well as scanners and printers. Computers in student labs are equipped with word processing, spreadsheet, database, presentation, web development, and statistical analysis software.

Canisius College supports an extensive website and portal (myCanisius) that includes web-based electronic mail, course materials, course discussion boards and course registration. The myCanisius portal can be reached from the Canisius web site (http://www.canisius.edu).

Most instructors post course materials in our learning management system, Desire2Learn (D2L), which is accessed through myCanisius.

The ITS Help Desk is available for walk-up assistance in the Library, by phone at 716-888-8340, or by email (helpdesk@canisius.edu).

Koessler Athletic Center

The focal point of all campus sports activity is the Koessler Athletic Center (https://www.canisius.edu/about/campus/signature-facilities/). Better known as "the KAC," the center houses the Physical Education and Athletic departments, and is the site of intercollegiate, intramural, recreation and local high school sporting events.

The KAC is comprised of a multi-purpose gymnasium, swimming pool, training room, rehabilitation room, a weight room, several classrooms and offices for the departments of Athletics and Kinesiology. It is also home to the Canisius College Sports Hall of Fame.

Adjacent to the KAC is the Patrick Lee Student Athletic Center, which is available to all Canisius students for recreational and intramural activities. The facility has two full basketball courts, three volleyball courts and an indoor batting cage.

Directly adjacent to the KAC is the Demske Sports Complex, a multi-use, all-purpose, all-weather artificial A Turf field that is home to the Golden Griffin soccer, lacrosse, baseball and softball teams.

Retention

Retention from freshman to sophomore years has been as follows for the last five years:

- Class of 2017 – 86%
- Class of 2018 – 83%
- Class of 2019 – 83%
- Class of 2020 – 83%
- Class of 2021 – 85%

As defined by the federal government, the retention rate is the percentage of first-time bachelor's degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. Freshmen are defined as those who registered prior to their initial matriculation. Sophomores are those still registered following the drop/add period one year later.

Non-Discrimination

Canisius College does not discriminate on the basis of age, race, religion or creed, color, sex, national or ethnic origin, sexual orientation, marital status, veteran's status, genetic predisposition or carrier status, or disability in administration of its educational policies, employment practices, admissions policies, scholarship and loan programs, and athletic and other school administered programs. Canisius admits students of any age, race, religion or creed, color, sex, national or ethnic origin, sexual orientation, marital status, or veteran's status to all rights, privileges, programs and activities generally accorded or made available to students at the college. It continues to be the policy of Canisius College not to discriminate on the basis of handicap. No person is denied employment, admission, or access solely because of any physical, mental, or medical impairment which is unrelated to the ability to engage in the activities involved in the education requirements or occupation for which application has been made.

Admission Policies

All persons of ability and achievement are welcome in all divisions of Canisius College. Admissibility as students is determined based on aptitude, achievement and character.

Secondary School Preparation

The secondary school program of studies should include a minimum of 16 units of credit in academic subjects. The college considers academic subjects as those stressing intellectual development, including but not limited to English, social studies, science, mathematics and foreign language.

Applications for Freshman Admission

Candidates for freshman admission to the college should complete the admissions application either in paper form or online. Alternatively, students may submit the Common Application, which is given full and equal consideration. A complete application requires an official high school transcript, a school counselor recommendation, official test scores from the SAT-I or ACT examinations, an essay and any other supporting documentation the student chooses to submit. Records of homeschooling

and GED must be submitted to the Office of Admission and are evaluated on a case-by-case basis.

Rolling Admission and Priority Notification

Canisius adheres to a rolling admissions policy, which allows students to apply at any time until the class is full. Canisius offers an early action deadline of November 1. Students who apply by this date will be notified of an admissions decision and scholarship award by December 15 or earlier. Students who do not apply by this date are encouraged to apply by March 1 for full and equal consideration.

Condition of Admittance

Students who are accepted for freshman admission are admitted with the expectation that they will successfully complete their senior year of high school and graduate prior to enrollment at Canisius. Failure to graduate from high school or to maintain the academic standard for which admission has been granted are sufficient grounds to rescind an offer of admission to Canisius.

Early Admission Policy

Canisius College will accept approved candidates for early admission from high schools that officially approve of this policy and whose curricula are satisfactory. Early admission candidates are defined as students who have completed all or a majority of their high school graduation requirements in less than four years. Students applying for early admission must adhere to all freshmen admission policies.

Additional conditions for early admission are as follows:

1. Students must be recommended by their high school principal or counselor with the understanding that students will only be recommended if they have demonstrated excellence in academic achievement and motivation.
2. Students must have completed three years of their high school curriculum prior to enrollment at Canisius. Exceptions to this rule are very unusual.
3. Ordinarily, students must have reached their sixteenth birthday or will reach their sixteenth birthday by the end of the first semester of freshman year.

Candidate's Reply Date Agreement — May 1

Canisius College adheres to the College Entrance Examination Board's Candidates' Reply Date Agreement (CRDA). According to this policy students may submit their tuition (and housing) deposit upon receipt of their letter of acceptance or any time prior to and including May 1. The deposit is non-refundable after May 1.

International Students

International candidates for undergraduate admission should submit a completed application and certified transcripts from all secondary schools or colleges attended. Transcripts not in English should be accompanied by a certified English translation. International students whose native language is not English, and/or students whose primary language of instruction is not English, are required to submit an English language proficiency document or score. All documents should be submitted to the Office of Undergraduate Admissions.

In order to attend Canisius College, Canadian and other international students must receive a Certificate of Visa Eligibility (Form 1-20). This form is issued by Canisius College after the student has submitted proof of the student's ability to meet all educational and living expenses for the entire period of study. The student must provide this proof by filling out the Canisius College International Student Certification of Finances form, which includes a budget worksheet to help the student determine the total educational expenses. This form must have enough funds listed (in U.S. dollars) and verified to cover the full amount of the student's educational and living expenses. This form must be submitted to the Office of Admissions.

Applicants with Criminal Backgrounds

Canisius College is committed to ensuring that students have the ability to benefit from the education received at the College. Certain affiliates associated with the college require that students placed in their facility for clinical/internship/field placement experiences clear a criminal background check prior to placement. Students whose background check reveals a criminal history may be prevented access to the clinical site, and as a result, the student may not have sufficient clinical experience to successfully complete the program. Additionally, licensing boards may deny the individual the opportunity to sit for an examination if an applicant has a criminal history.

Applications for Transfer Admission

Students who have graduated from high school and have completed at least three credit hours of post-secondary, college-level work as a matriculated student will be considered for transfer admission to Canisius College. Candidates for transfer admission should submit an application for transfer admission and submit official transcripts for all colleges attended. Candidates who have completed fewer than 24 credit hours of college level work at the time of application must also submit an official high school transcript. All applicants applying to the School of Education must submit an official high school transcript and SAT or ACT scores even if more than 24 credit hours of college level work have been completed.

Adult Applicants

Applicants for freshmen or transfer admission who have had a break in their academic work must submit a statement of activity for the period representing the break in their education.

Dismissed Students

Academic policy at Canisius College prohibits acceptance of a student who has been academically dismissed from another college or university until one academic year after date of dismissal. Exceptions to this policy may be made after review of the applicant's academic credentials by the appropriate academic dean.

Policies and Processes for Incoming Freshmen

Under the conditions indicated below, students may obtain credit for college-level courses delivered in high school through advanced placement exams, International Baccalaureate scores, CLEP exams, and submission of transcripts from accredited two- and four-year institutions. Requests for acceptance of such credits should be directed to the Office of Admissions for processing and then directed to the Griff Center for Academic Engagement who will consult with the major program or department

as needed. A maximum of 30 credit hours will be granted to first-time freshmen enrolling directly from high school.

College Courses Delivered in High School Settings

Students who achieve a grade of C- or above will earn at least elective credit for classes offered in their high school by accredited colleges. An official college transcript must be received by Canisius College before credit can be awarded. All requests to use such credits to fulfill core curriculum or major requirements should be made to the Griff Center for Academic Engagement.

Advanced Placement Courses

Students achieving a 3 or higher on a College Entrance Examination Board Advanced Placement Test will normally earn at least elective credit toward a degree at Canisius College. (Canisius College reserves the right to deny credit for a 3 in a particular Advanced Placement Test if subsequent student performance in relevant courses at Canisius College has provided evidence that a 3 on that test does not demonstrate college level competence.) Core curriculum credit for such courses is subject to approval by the Office of Academic Affairs, and credit in the major is subject to approval of course equivalency by the major department or program. Official results of the exam must be sent from the College Board to Canisius College before credit can be awarded. All such requests should be directed to the Student Records and Financial Services Center who will consult with the major program or department as needed.

College Level Examination Program

Students who are applying for admission or who are presently in attendance may obtain credit for previously completed examinations sponsored by the College Level Examination Program (CLEP) of the College Entrance Examination Board (CEEB). The minimum acceptable grades for these exams are “Pass” for exams graded Pass/Fail, “C” for exams with letter grades, and 50 on exams graded on a standard score scale of 20 to 80. Credit is not awarded for the CLEP general examinations. Credit in appropriate subject area exams is granted by the Student Records and Financial Services Center after the student has matriculated at the college. However, not all CLEP exams are acceptable as transfer credits. In addition, credits to be used in fulfilling departmental major requirements must first be approved in writing by the department chair. Students should plan to complete all their coursework at the college. Permission for matriculating students to take CLEP exams to fulfill degree requirements must be requested from the appropriate associate dean and will be granted only under extraordinary circumstances.

Regents College Examinations

Students who are applying for admission to Canisius College or who are presently in attendance may be eligible, under unusual circumstances, to receive college credit for previous experience through the Regents College Examination program. The minimum acceptable score on the examinations is 50. Students who have already taken such examinations must receive permission to use the credit from the appropriate assistant or associate dean.

Policies for Transfer Students

A transfer credit evaluation will be completed for transfer students who are accepted for admission to Canisius. A maximum of 60 credit hours may be transferred from two-year colleges and at least 60 more credit hours must be earned at Canisius in order to be awarded the bachelor’s degree. Students transferring from four-year institutions must complete at least 30 credit hours at Canisius, including at least 18 in their major, in order to earn the bachelor’s degree.

Transfer credit from accredited two- and four-year institutions of higher education is granted when the course objectives for the completed work are substantially the same as the course objectives at Canisius College. Transfer credit is awarded only for courses with a minimum grade of C- or better.

Teacher certification candidates must meet the state of New York and the Council for Accreditation of Educator Preparation (CAEP) admission requirements. In addition, a grade of C or better is required to transfer courses listed as major courses in teacher education (including special education, adolescence education, and childhood education), physical education, and health education programs. Once transcripts have been submitted to and reviewed by the Office of Student Records, the student must meet with the appropriate associate dean to review the transfer credit, determine the appropriate major, and register for classes.

Canisius College has a variety of articulation and dual degree agreements with community and junior colleges throughout New York State. These agreements recognize specific programs and majors at the two-year institutions that allow students the most comprehensive transfer of courses and credits. Students at these institutions should consult with their academic counseling center for specific information on articulated programs and majors.

Policies for a Second Degree

Individuals may enroll in a second baccalaureate degree if they can demonstrate that a second bachelor’s degree is necessary for their career. Individuals must fulfill the admissions requirements for the degree sought and must receive approval from the appropriate dean prior to matriculation in the program. These individuals, however, should be advised that in most cases it is unnecessary to receive a second baccalaureate degree; rather they merely need to complete a prescribed series of courses that apply to their career or life needs.

If they still wish to receive the second degree, the following policy will be the guideline: The credits received from the first bachelor’s degree will be applied as transfer credit to the second degree. The first degree need not have been completed at Canisius. The minimum requirements for the second degree include the completion of a minimum of at least 30 credit hours at Canisius, with at least 18 credit hours of the courses being taken from the selected major. The student must complete all the departmental requirements for the degree, as well as the general graduation requirements, including a 2.00 grade point average for all courses taken at Canisius.

Individuals should meet with the appropriate dean or advisor to outline the program of courses necessary for the completion of the second degree.

Matriculated Students

Most undergraduate students enter the College as matriculants, i.e., as students who are enrolled in a specific program leading to an undergraduate degree. Each student is responsible for the completion of the requirements and course prerequisites in force in the student’s program of study at the time of matriculation.

A student who interrupts matriculation for two or more semesters must apply for readmission and is bound by the requirements in force at the time of readmission. Please contact the admissions office for the current reapplication requirements.

Non-Matriculated Students

Non-matriculated students, i.e., individuals who are not working towards a degree at Canisius, may be approved for a maximum of 9 credit hours per semester. Courses requiring prerequisites may be taken only when supporting documents are presented at the time of application insuring that the prerequisite courses have been successfully completed. Non-matriculated students will receive the normal college credit for all work successfully completed.

Students enrolled on a non-matriculated basis who wish to enroll as matriculated students must submit all required admission documentation to the Office of Admissions based on their status as either a freshman or transfer student.

Visiting Students

Students from other colleges or universities who wish to attend Canisius for the purpose of transferring earned credits to their home institutions must apply for entrance through the Office of Undergraduate Admissions. An application for visitation must be accompanied by a letter of permission from the appropriate academic dean at the home institution. The letter, in substance, should state that the applicant has permission to take courses at Canisius for the purpose of transfer back to the home institution.

Auditors

Students wishing to audit courses at Canisius College must secure the approval of the Student Records and Financial Services Center. No credit is granted for an audited course. Responsibility for examination, assignments and attendance is determined by the faculty member teaching the course. No student will be permitted to change from audit to credit after the end of the add/drop period. Auditing fees are listed in the Tuition section of the current Undergraduate Catalog.

Tuition, Fees, and Aid

- Student Financial Aid (p. 19)
- Tuition & Fees (p. 25)

The Student Records and Financial Services Center handles most financial transactions between students and the college including tuition collection and payment plans, meal plan arrangements, parking permits, and the disbursement of work study paychecks. The center is located on the first floor of Bagen Hall. The center can also be reached by mail, phone, or email (studentservices@canisius.edu).

Mailing address:
Student Records & Financial Services Center
Canisius College
2001 Main Steet
Buffalo, NY 14208

Phone number:
(716) 888-2600
(800) 238-8160

Student Financial Aid

The cost of financing a college education is an important consideration for both students and parents. A Canisius College education is affordable and can be made financially possible through the many types of financial assistance administered by the Student Records and Financial Services Center. The staff of this office is available to help both students and parents plan for the financing of a Canisius education.

Students seeking federal and state financial assistance or institutional funds must complete the Free Application for Federal Student Aid (FAFSA).

The FAFSA may be obtained online at the FAFSA website (https://www.fafsa.gov) and becomes available each year on October 1st for the next aid year. Returning students should complete their applications by April 15 for first-preference consideration. These dates are recommendations. However, students who do not meet these dates are urged to apply at any time for second consideration.

General Eligibility Requirements

To be considered for student financial aid, a student must:

1. Study at least half-time at an educational institution approved by the federal government. It may be located in New York, in another state, or in a foreign country.
2. Be a U.S. citizen or eligible non-citizen.
3. Be a resident of New York State for 12 months immediately preceding the first term for which the student is applying for aid (for New York State financial aid programs).
4. Be in good academic standing and making satisfactory academic progress.
5. Have no outstanding debt from a previous student loan default and must not owe a refund on any federal grant at any institution.
6. Demonstrate compliance with applicable Selective Service laws.
7. Demonstrate financial need or meet individual program or scholarship requirements.
8. Have never received a drug conviction while receiving aid **or** have satisfied federal requirements to reinstate eligibility after a drug conviction.

Estimated Student Budget for the 2019-2020 Academic Year

Fee	Commuter	Resident
Tuition	$ 27,940	$ 27,940
Fees	1,488	1,488
Books/Supplies	1,000	1,000
Room and Board	2,200	15,526
Personal/Recreation	700	700
Transportation	800	800
Total	$ 34,128	$ 43,454

Repeating a Course

The repeating of a course may have an impact on a student's financial aid. Once a student has received financial aid for a course for which they have obtained a passing grade, they may not receive New York State aid again for that course.

Therefore, students repeating a course in this instance should take care to enroll in enough credit hours in addition to the course to maintain their aid. For example: You are registered for 12 credits and 3 of those credits are for a repeated course. For New York State aid purposes (TAP, HEOP, Merit Scholarship, etc.) you are only taking 9 credits and are not eligible for state

aid. You would need to register for 15 credits in order to keep your state financial aid.

Students repeating a failed course, or a course requiring a higher grade for your major requirement in order to graduate, may be able to receive aid for that repeated course. Students should confer with a member of the financial aid staff for guidance.

Criteria for Student Financial Aid Consideration

In order to be considered for student financial aid, students must matriculate. That is, they must have satisfied the entrance requirements and be following a prescribed program of study toward a degree. Non-matriculated students are students who are not pursuing a degree at Canisius College, but have met the college's entrance requirements and have received the permission of the appropriate dean to take classes. Non-matriculated students are not eligible for financial aid.

Student Financial Aid awards are generally based on full-time attendance, which is at least 12 credit hours per academic semester. It is recommended that students contact the Student Records & Financial Services Center before reducing their academic load below 12 credit hours per semester in order to determine the effect on their financial aid. Students whose academic loads do fall below 12 hours per semester are required to contact the Student Records and Financial Services Center because it is very likely that the financial aid award will be affected. Certain aid programs are available to students who have enrolled part-time for at least six credit hours per semester. Students should contact the Student Records and Financial Services Center for further information.

Note: To receive financial aid, a student must remain "in Good Academic Standing." For further information, the student should read the section entitled Satisfactory Academic Standing.

Other Information

Awards Notification

Freshmen applicants who submit all necessary forms by February 15 are notified by the Student Records and Financial Services Center by March 1, or before the May 1 Candidate Reply Date. Upperclassmen and graduate students who submit applications by April 15 receive award notices by July 1. Students submitting applications after April 15 are notified as soon as possible.

Over-Awards

Each year a number of financial aid recipients are "over-awarded." As a result, checks are withheld, and, in some cases, students are billed for funds already disbursed. This problem arises because of the length of time needed to match funds from various institutional sources and/or outside agencies against the individual student's record. To avoid this problem, students are urged to notify the Student Records & Financial Services Center promptly when they receive additional funds from any source not listed in their award letters, or when a student changes his/her enrollment status.

New York State Tuition Assistance Program

The Tuition Assistance Program (TAP) is a state-funded program for New York State residents. It may be used only at approved post-secondary institutions within New York State. Grants range from $500 to $5,165 a year, based on the family's net taxable income for the previous year. There is no competition for this award. To be eligible, students must be full-time matriculated students who meet the standards stated below. Students may receive only eight semesters of TAP as undergraduates. However, students enrolled in approved five-year programs are eligible for 10 semesters of undergraduate TAP. At this time, only HEOP (Higher Education Opportunity Program) is such an approved program at Canisius College. The following table illustrates the amount of a TAP award at Canisius.

2019-2020 TAP

2015 New York State Net Taxable Income	TAP Award
under 7,000	5,165
8,000	5,095
9,000	5,025
10,000	4,955
11,000	4,885
12,000	4,785
13,000	4,685
14,000	4,585
15,000	4,485
16,000	4,385
17,000	4,285
18,000	4,185
19,000	4,065
20,000	3,945
21,000	3,825
22,000	3,705
23,000	3,585
24,000	3,465
25,000	3,345
26,000	3,225
27,000	3,105
28,000	2,985
29,000	2,865
30,000	2,745
31,000	2,625
32,000	2,505
33,000	2,385
34,000	2,265
35,000	2,145
36,000	2,025
37,000	1,905
38,000	1,785
39,000	1,665
40,000	1,545
41,000	1,425
42,000	1,305
43,000	1,185
44,000	1,065
45,000	945
46,000	825
47,000	705
48,000	585

49,000 - 70,000	500
70,001 - 80,000	500

Federal Financial Aid Programs

The FAFSA and all requested income verification forms are the required forms for the following programs administered and/or awarded by Canisius College.

Federal Pell Grant

The Federal Pell Grant Program was legislated by the federal government through the 1972 Education Amendments and was amended by the Higher Education Opportunity Act of 2008.

In order to be eligible for this grant, a student must be a U.S. citizen or a permanent resident alien. All full-time and part-time matriculating students should apply for this grant. Federal Pell grants range from $ 657 to $6,195 depending on the amount of funds appropriated by the federal government each year. Individual family circumstances and the cost of education at the college being attended are also taken into consideration. The Free Application for Federal Student Aid (FAFSA) is used to apply for the Federal Pell Grant Program. The FAFSA is available online at the FAFSA website (https://www.fafsa.gov).

Federal Pell Grant recipients are limited to the equivalent of six academic years of full-time study.

Federal Work-Study Program

The Federal Work-Study Program (FWS) is a federally funded program designed to offer students part-time employment while in school. It is available to both full-time and part-time (at least six hours) matriculating students. Students are employed on campus, ideally in work related to their academic and vocational goals. A student qualifying for Federal Work-Study employment may work between five and 15 hours a week during the academic year and up to 40 hours a week during the summer.

All job referrals are made by the Student Records and Financial Services Center.

Federal Supplemental Educational Opportunity Grant

The Federal Supplemental Educational Opportunity Grant (FSEOG) is a federally funded program administered by Canisius College and based on financial need. Recipients may be either full-time or part-time (at least six hours) matriculating students. At Canisius, grants range from $200 to $2,000 a year. This award is a grant, not a loan. FSEOG funds are limited. FSEOG will be awarded to students with exceptional financial need, that is, to students whose financial need exceeds 50 percent of the student budget under which they are evaluated. Priority will be given to students who have the lowest expected family contributions and/or who are eligible for the Federal Pell Grant Program.

Return of Title IV Funds

It is the policy of Canisius College to return federal funds which have been dispersed to an undergraduate student who has withdrawn or stopped attending the College to the Federal Title IV programs in compliance with the regulations of the Department of Education.

In order to be eligible for and retain federal financial aid (Title IV) funds, students must maintain enrollment in classes for the entire semester. Failure to do so results in a recalculation of aid funds and may result in a return of unearned Title IV funds.

If a student leaves the College prior to completing 60% of a payment period or semester, the Student Records and Financial Services Center will recalculate eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula:

Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or semester. (Any break of five days or more is not counted as part of the days in the semester.) This percentage is also the percentage of earned aid. Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula:

Aid to be returned = (100% of the aid that could be disbursed minus the percentage of earned aid) multiplied by the total amount of aid that could have been disbursed during the payment period or semester.

If a student earned less aid than was disbursed, the College will return a portion of the funds and the student will be required to return a portion of the funds. When Title IV funds are returned, the student borrower may owe a debit balance to the College.

If the student did not receive all of the funds that were earned prior to withdrawing, a post-withdrawal disbursement may be due. If the post-withdrawal disbursement includes loan funds, the student must give permission before the funds can be disbursed. The College may automatically use all or a portion of the post-withdrawal disbursement of grant funds for tuition, fees, and room and board charges. Permission is required to use the post-withdrawal grant disbursement for all other College charges. Students will be notified of post-withdrawal disbursement eligibility within 30 days of the date of withdrawal determination.

The College will return the Title IV funds within 45 days of the date it determines the student withdrew. Title IV funds will be returned to the Department of Education in the following order:

1. Unsubsidized Federal Stafford Loan
2. Subsidized Federal Stafford Loan
3. Federal Parent (PLUS) Loan
4. Federal Pell Grant
5. Federal Supplemental Opportunity Grant
6. Other Title IV Assistance
7. Other state
8. Private and Institutional Aid
9. Student

Merit Scholarships

Canisius College funds renewable scholarships for incoming freshmen which range from $6,000 to $15,000 for the 2019-2020 school year. Among the scholarships awarded are the Ignatian Scholarships, the Trustee's Scholarships, the Peter Canisius Scholarship, the Magis Scholarship, the Dean's Academic Scholarships, and the Benefactor's Scholarships.

These scholarships are awarded on the basis of SAT or ACT scores and high school records. A separate scholarship application is not required. In order to be eligible for one of these scholarships, a student must:

1. Be accepted for admission to Canisius; and
2. Take the SAT or ACT tests. (Scores for tests taken before December 31 of the senior year are preferred)

Freshmen who are offered these scholarships are required to maintain a 2.0 cumulative GPA at the college to retain their scholarship aid. Ignatian Scholarship recipients must maintain a 3.0 cumulative GPA. All applicants are encouraged to apply for financial aid.

Martin Luther King Scholarships

The purpose of the Martin Luther King Scholarship Program is to provide assistance to students who aspire to the goals of Dr. Martin Luther King. Recipients are awarded for $750 per year for 4 years of full-time study. Applicants must be accepted for admissions and submit a separate application, essay and letters of recommendation by the deadline.

Other Programs

Higher Education Opportunity Program

The Higher Education Opportunity Program (HEOP) is a New York State education program. The purpose of this program is to assist academically under-prepared and financially disadvantaged students. In order to qualify, students must meet specific criteria in each of these areas.

Army ROTC Scholarship Program

The purpose of the Army ROTC Scholarship Program is to assist outstanding students in paying for their college education while they complete requirements for a commission in the U.S. Army Reserves, the National Guard, or the United States Army. High school students interested in the four-year scholarship should contact their high school guidance counselors or the Professor of Military Science at Canisius College. Students may also apply on the Internet at www.armyrotc.com. The application deadline is January 10 of the student's senior year in high school.

Three- and two-year scholarships are also available to Canisius College students. Students should meet with the Army ROTC Enrollment Officer for details on how to compete for scholarships. This should be done at the beginning of each semester.

The scholarship covers tuition and mandatory fees. All qualifying students will also receive a flat rate of $600 for books, and a subsistence allowance ranging from $300-$500 per month for the length of the scholarship, based on the grade year.

Canisius College also provides a grant to assist resident ROTC Scholarship recipients with their room and board costs.

Endowed Scholarships

Endowed scholarships are permanently invested funds that provide a perpetual source of scholarship assistance to deserving students. These are made possible by founded gifts, which yield an annual income sufficient to defray, in whole or in part, the tuition and fees of the student.

The annual income from endowed scholarships partially finances the scholarship program of Canisius College according to the wishes of the donors.

Education Loans

A loan is money the student borrows. It must be paid back. A loan is a serious obligation. Students should borrow only what they need. Education loans are for tuition and fees, room and board, books, transportation and personal expenses.

An education loan cannot exceed the student's total educational costs minus other student financial aid and, if required, a family contribution. Education loans have lower interest rates than most other types of loans.

The Federal Direct Loan Program loans offered at Canisius College include:

- Federal Direct Student Loans (subsidized & unsubsidized)
- Federal Parent Loans for Students (Federal PLUS)

Federal Direct Student Loans

Federal Direct Student Loans are available to undergraduate students with demonstrated financial need. The maximum loan amounts available to undergraduates are as follows:

First Year	$3,500 each year
Second Year	$4,500 each year
Third, Fourth & Fifth Years +	$5,500 each year

Note: In addition, students may borrow an additional $2,000 in unsubsidized loan funds each year. Students are required to pay interest on this loan while they are attending school.

The total undergraduate Federal Direct amount (both subsidized and unsubsidized combined) cannot exceed $31,000.

Independent undergraduates may borrow up to an additional $4000 for their first and second years and $5000 for their third, fourth, and if necessary fifth year of study through the Federal Direct Unsubsidized Loan Program. Students are required to pay interest on this loan while they are in school. The total undergraduate Federal Direct Loan amount for independent students (both subsidized and unsubsidized) cannot exceed $57,500.

Beginning July 1, 2013, first-time borrowers will be eligible for subsidized direct loans for a maximum of 150% of the publicized length of their program. For example: A student enrolled in a four-year program may receive subsidized direct loans for a maximum of six years. This limitation is not imposed on unsubsidized or PLUS loans. Aggregate limits still apply.

How to Get a Loan

Three factors must be considered to determine Federal Direct Loan eligibility: educational costs, other financial aid the student will receive, and the expected family contribution as determined through an approved needs-analysis system. Therefore, all students must submit a FAFSA before the Federal Direct Loan can be processed. A loan is usually for a single academic year. An online entrance interview must be completed before the loan is disbursed. Prior to graduation or withdrawal, the student must complete an online exit interview. The purpose of these interviews is to explain the rights and responsibilities, including repayment obligations.

The school must report these figures to the federal loan processor and certify the student's enrollment status. Borrowers are required to complete an electronic Master Promissory Note (e-MPN). Information about the e-MPN and instructions for submission may be accessed at the Federal Student Aid website (https://www.studentloans.gov).

Paying Back a Loan

The student is responsible for:

1. Repayment of the amount borrowed;
2. Interest on the amount borrowed;
3. Fees paid at the time he/she receives the loan check.

When a student gets a loan, the terms of repayment are explained. Students must be sure that they understand all repayment terms before signing the loan's promissory note. If the student fails to meet these terms, he/she is in default and the entire balance of the loan becomes due.

Costs

The interest rate for all Federal Direct Loans on which the first disbursement is made on or after July 1, 2019 (regardless of any previous loan history) will be the current fixed rate of 4.53%. For Subsidized loans, there are no interest payments while the student is in school. Students who borrow through the Unsubsidized Federal Direct Loan must begin to pay the interest while in school. An origination fee of 1.062 percent of the amount borrowed may be charged. The fees are removed from the loan amount at the time the loan is issued.

Federal Direct Parent Loans for Undergraduate Students (Federal Direct Plus)

These loans are for parents of financially dependent undergraduate students. Parents may borrow up to the cost of attendance minus financial aid per year per child. A student should apply for a Federal Direct Loan before the parent applies for Federal Direct PLUS. PLUS Loans may be applied for at www.studentloans.gov.

Costs

The interest rate for PLUS loans on which the first disbursement is made on or after July 1, 2019 will be the current fixed rate of 7.08%. Interest begins at the time of disbursement. An origination fee of up to 4.248 percent of the amount borrowed. The fees are removed from the loan amount at the time that the loan is issued.

Repayment

Repayment of the amount borrowed plus interest begins 60 days after the loan is fully disbursed. The minimum monthly payment is $50. Repayment must be completed within 5-10 years depending on how much the parent borrowed. Interest accrues immediately and repayment begins within 60 days of disbursement. However, parents may request an in-school deferment from the federal government if they wish. Repayment would then begin at graduation or separation from school.

Other Financing Options

The following options are available to assist students and their parents in financing a Canisius education:

1. **Griffin Tuition Payment Plan:** This plan allows parents to budget tuition payments over a full academic year. A semesterly fee of $50 is charged. Further information is available at the Student Records and Financial Services Center.

2. **Canisius College Installment Payment Plan:** A student who is unable to pay his/her semester bill in full by the due date may pay the balance in monthly payments by signing a two-payment installment plan. Installment plans are subject to an administrative fee of $50. A 5 percent penalty fee on the total unpaid balance will be added if the plan remains unpaid after the due date.

Financial Aid Check List

To be evaluated for possible financial aid, the student must submit the following forms each academic year:

1. Free Application for Federal Student Aid (FAFSA) and a TAP application. The FAFSA is available online at www.fafsa.gov. The TAP application is available to New York State residents as a direct link when they file the FAFSA online or by visiting TAP on the WEB at www.hesc.ny.gov.
2. If requested, Federal Income Tax 1040 Form transcripts (parents and student) for the appropriate calendar year when necessary or other requested verification of income including child support. These items should be returned to the Student Records and Financial Services Center. Students are reminded that financial aid awarded for the freshman year or any other year does not guarantee aid for the following year. Students must re-apply for financial assistance each year.

Financial Assistance Information for Students

Section 485 of the Education Amendments of 1998 legislates that institutions participating in Title IV Student Aid Programs shall provide prospective and enrolled students with information about student aid at their respective institutions.

Canisius College has a Student Financial Aid Policy and Procedures Manual which is updated periodically. This manual describes the following:

1. Institutional, federal, and state student aid programs available at Canisius;
2. Procedures for awarding student aid at Canisius;
3. Application processes and deadline dates for the various student aid programs;
4. Student rights and responsibilities under the appropriate student aid programs;
5. Appropriate budgets, outlining an estimated cost of attendance, which includes tuition, fees, books and supplies, room and board on campus and other related costs;
6. Institutional refund policy; and
7. Academic standards needed to retain financial eligibility.

The Student Records and Financial Services Center (Bagen 106) will provide the above financial aid information upon request. Information pertaining to academic programs, special services available to the handicapped and institutional accreditation is explained elsewhere in the college catalog.

Satisfactory Academic Standing

To receive student financial aid, a student must remain "in Good Academic Standing." This means that students must:

1. make satisfactory academic progress toward the completion of their program requirements and
2. pursue the program of study in which they are enrolled

The two elements of program pursuit and satisfactory academic progress must be met for each term of study in which an award is received.

Note: Satisfactory Progress

A student must acquire a minimum number of credits at each semester interval and a minimum cumulative GPA. Students must meet the following satisfactory progress standards based on a 4.0 grading system:

Undergraduate #1

Applies to students first receiving aid in 2007-08 through 2009-10 and HEOP students first receiving aid in 2007-08 and thereafter.

Before being certified for aid for this semester:	A student must have accrued at least this many graded credits:	With at least this Cumulative Quality Point Average:
1st	0	0
2nd	3	1.1
3rd	9	1.2
4th	21	1.3
5th	33	2.0
6th	45	2.0
7th	60	2.0
8th	75	2.0
9th	90	2.0
10th	105	2.0

For example: Student A has accumulated 18 hours and has a 1.2 GPA. She is entering her fourth semester and fourth payment of aid and needs 21 hours and a 1.3 GPA. She is ineligible for New York State student aid because she does not meet the satisfactory progress requirements.

Undergraduate #2

Applies to students first receiving aid in 2010-11 and thereafter (with the exception of HEOP students)

Before being certified for aid for this semester:	A student must have accrued at least this many graded credits:	With at least this Cumulative Quality Point Average:
1st	0	0
2nd	6	1.5
3rd	15	1.8
4th	27	1.8
5th	39	2.0
6th	51	2.0
7th	66	2.0
8th	81	2.0
9th	96	2.0
10th	111	2.0

For example: Student B has accumulated 18 credit hours and has a 2.0 GPA. He is entering his third semester of school and his third payment of aid. At this point, he needed nine hours and a 1.2 to maintain satisfactory progress. However, during his second semester, he completed only three credit hours. Consequently, he did not maintain the program pursuit aspect and is ineligible for his third payment.

Program Pursuit

This requirement applies to all undergraduate students regardless of which Satisfactory Academic Progress Chart they must follow.

A student must receive a passing or failing grade in a certain percentage of a full-time course load. The percentage increases from 50 percent of the minimum full-time load in each semester of study in the first year for which an award is made, to 75 percent of the minimum full-time load in each term of study in the second year for which an award is made, to 100 percent of the minimum full-time load in each term of study in the third and each succeeding year for which an award is made. Grades of W (indicating a student's withdrawal from a course) do not satisfy Program Pursuit requirements. Full-time students must meet the following requirements for Program Pursuit:

Undergraduate

Before being certified for aid for this semester:	Minimum credit hours a student must have completed in the previous semester to meet Program Pursuit requirement:
1st	0
2nd	6
3rd	6
4th	9
5th	9
6th	12
7th	12
8th	12
9th	12
10th	12

For example: Student B has accumulated 18 credit hours and has a 2.0 GPA. He is entering his third semester of school and his third payment of aid. At this point, he needed nine hours and a 1.2 to maintain satisfactory progress. However, during his second semester, he completed only three credit hours. Consequently, he did not maintain the program pursuit aspect and is ineligible for his third payment.

Waivers

If a student fails to maintain program pursuit, fails to make satisfactory progress, or fails to meet both of these elements of good standing, the college may grant a waiver which would allow the student to receive financial aid for the next semester. A maximum of one waiver at the undergraduate level and one at the graduate level may be awarded to a student. The waiver will not be automatic since it is intended to accommodate only extraordinary cases. Waiver policies are somewhat different for aid received under federal Title IV programs and aid received under New York State programs.

Federal Programs

Each student's progress will be evaluated every semester. Students will be required to meet the academic standards as outlined in the college catalog.

However, Canisius College will allow all students a one-time warning following their first adverse determination of satisfactory progress. During this warning period, the students still will be considered to be maintaining satisfactory progress and are eligible for federal Title IV funds. "The fact that a student was placed on warning must be made a part of his or her record." (Source: official Federal Regulations.) A one-time warning period is defined as one academic semester.

Students not meeting satisfactory academic progress or program pursuit requirements will be placed on financial aid warning status for the ensuing semester of the student's enrollment. Students will be allowed to retain their financial aid during the warning semester.

Financial aid suspension will occur following the semester of warning if the student fails to meet the required academic standards. Reinstatement of aid will occur when the minimum standards have again been earned. Students may use summer classes (at their own expense) to increase their GPA and/or their total credits earned sufficiently to reinstate their eligibility for financial aid. However, courses taken in the summer will not resolve a student's

unsatisfactory pursuit. Only courses taken at Canisius College will affect a student's GPA. Students must complete the requirements for a degree within 150 percent of the normal time allotted for program completion or within a maximum of six years. The following aid programs are subject to the conditions described above:

- Federal Pell Grant
- Federal Teacher Education Assistance for College and Higher Education (TEACH) Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work Study (FWS)
- Federal Direct Student Loans (subsidized and unsubsidized)
- Federal Parent Loan for Undergraduate Students (Federal PLUS)

New York State Programs

A waiver may be granted if situations beyond a student's control prevent the student from maintaining satisfactory academic progress or program pursuit. These situations must be documented. The waiver will be granted only when there is reasonable expectation that the student will be able to meet the successive steps for financial aid eligibility as specified in the tables above. Reasons for which waivers may be granted include:

1. personal medical problems;
2. family medical problems;
3. severe personal problems; and
4. other circumstances beyond the control of the student.

Any student wishing to request a waiver must submit to the associate dean of his/her division a written statement detailing the reasons why special consideration should be given. (A statement simply requesting a waiver is insufficient.)

The written statement must be postmarked no later than ten calendar days after the date of the notice of loss of financial aid eligibility. Documentation supporting the stated reasons for special consideration must be provided and should be included with the written statement or should be forthcoming from appropriate third parties or agencies. The student is responsible for requesting that all documentation be sent or brought to the associate dean. Documentation should indicate that the student's problems have been directly responsible for his or her inability to meet the satisfactory progress and/or program pursuit requirements.

The appropriate associate dean will review the student's written statement and supporting documentation. If additional information is needed, the associate dean may require an appointment with the student. A student will be informed of the associate dean's decision within seven calendar days of receipt of the student's written request. The associate dean will confer with any student being granted a waiver to ensure that the student is fully aware of his/her situation and that the student concurs with the granting of the waiver. The associate dean's decision on the waiver request is final.

Award programs affected by this policy at Canisius College include the following student aid programs:

- Empire State Scholarship for Excellence;
- Tuition Assistance Program (TAP) Part-Time TAP;
- Children of Deceased and Disabled Veterans (CV) Award, Children of Deceased State Correction Officers, State Civilian Employees of a Correction Facility (AT), and Fire Fighter Award;
- Higher Education Opportunity Program (HEOP);
- Vietnam Veterans Tuition Award.
- Enhanced Tuition Award

Reinstatement of Canisius' own institutional aid rests with the discretion of the Student Financial Aid Committee.

Part-Time Students

Part-time students may receive financial aid for up to twelve years, except when certain program limits have been reached. During each academic year of attendance as a part-time student, the student must maintain a cumulative quality point average comparable to that required of a full-time student, along with a comparable number of credits accumulated toward a degree.

Summer School

Students who lose eligibility for financial aid at the end of an academic year can sometimes make up the deficiency by attending summer school at their own expense. The Student Records and Financial Services Center should be consulted regarding the student's intention to do so and should be supplied with a transcript of grades after the completion of courses. Only courses taken at Canisius will affect a student's grade point average. Summer courses will not resolve a student's unsatisfactory pursuit.

Tuition & Fees

General Regulations

Note: The information in this section is valid only for the academic year May 2019 through May 2020. For the most up-to-date numbers please visit the Canisius tuition and aid webpage (https://www.canisius.edu/tuition-aid/).

All tuition charges, student fees, and room and board charges are assessed and collected by the Student Records and Financial Services Center, with the exception of the deposit fee for new students that is collected by the Office of Admissions. The Trustees of the college, when necessary, may amend the tuition charges, fees and room and board charges.

Tuition Deposits

All candidates for undergraduate admission must make a pre-registration deposit of $200 on or before the Candidate's Reply Date of May 1. This deposit will be applied to the tuition bill of the first semester after the formal notice of acceptance. The entire deposit is forfeited if the student fails to enter the college or withdraws from the college before the completion of the semester.

Room Deposits

A $200 deposit is required of first time students occupying a room in one of the residence halls. The room deposit is non-refundable and is applied as a payment toward the spring semester student bill.

Payment of Tuition, Fees, and Room & Board

Tuition, fees, room and board are due on the date printed on the bill.

Students must either:

- Pay the bill in full less NYS awards.
- Be enrolled in a payment plan.

Failure to do this by the close of business on the due date printed on the bill will result in a $100 Late Fee assessed monthly (max. $300). The Student

Records and Financial Services Center is responsible for the assessment and collection of tuition and fees payable to Canisius College. All prior financial obligations to the College must be paid in full before registration will be permitted for any new semester. If payment or other arrangements are not made, the Student Records and Financial Services Center has the option of canceling the student's registration.

Canisius College accepts for payment cash, check (US funds only), money orders, wire transfers, and checks over the telephone. Tuition payments can be made online with your checking or savings account. It is the college policy to write the student's ID number on the face of the check or money order to ensure accurate posting. By submitting a check, please be aware that you are authorizing Canisius College to use information on your check to make a one-time electronic debit from your account at the financial institution indicated on your check. This electronic debit will be for the amount on the check. Funds may be withdrawn from your account as soon as the same day your payment is received and you will not receive your check back from your financial institution. Contact the Student Records and Financial Services Center if you have any questions about electronic check collection or options available if you do not want your payments collected electronically.

Checks for tuition payments should be mailed to:
Canisius College
Student Records and Financial Services Center
2001 Main Street
Buffalo, NY 14208

Make your check payable to Canisius College. Your student ID number must be clearly written on the check so that your tuition account is properly credited. All payments are credited on the day received.

Students personally guarantee and are responsible for all obligations to the college for tuition, fees and other charges. Students under the age of majority, under 18 in New York State, have by assumption received the personal guarantee of their parent(s) or guardian unless the student, the parent(s), or guardian notifies the college in writing of their invalidation of the personal and parental assumption of guarantee of all tuition, fees and other charges.

Any student who has an outstanding balance due the college is officially given notice that the college will withhold granting degrees and issuing grades, and discontinues the release of official transcript and academic records until all balances are paid in full. These students will also be subject to additional collection costs, attorneys' fees, late fees, fines or interest charges on the unpaid balance. Failure to receive a bill in the mail is not sufficient grounds to appeal college policy. It is the responsibility of the student to check their account balance online and remit timely payment.

Students participating in a tuition remission, exchange, or consortium program are responsible for various charges and fees. Please consult your academic associate dean or financial aid specialist.

Withdrawal, Cancellation, and Refund

Unofficial withdrawal does not cancel an account. No withdrawal credit will be given to any student who does not fill out the proper withdrawal forms provided by the appropriate associate academic dean. No withdrawals will be accepted or withdrawal credit given over the telephone. Withdrawal credit or refunds of tuition will be given to those students whose bills are paid, or who have signed a Semester Payment Plan on or before the due date specified on the bill.

No refund of tuition, housing or board costs may be demanded as a matter of right when a student leaves the college or college owned housing without completing the semester in which enrolled. For a student to request a refund, the withdrawal must be authorized by the appropriate associate academic dean and/or the Director of Residence Life or designee by the filing of an official form, countersigned by the parent or guardian in the case of a freshman. If this is done, the student may request in writing a refund of tuition, housing, and/or board costs only according to the following schedule:

First week of classes (Drop-and-Add Week)	100%
Second week of classes	90%
Third and fourth week of classes	50%
Fifth week through eighth week of classes	25%
After eighth week of classes	None

Fees are not refundable.

No refund of tuition will be granted to a full-time undergraduate student who withdraws from a course but continues attendance in other courses at the college, with the exception of drop-and-add week. Such students will be deemed to retain full-time status. Refunds of tuition will be calculated from the date on which the withdrawal is approved by the appropriate academic dean. The refund will be sent to the student within thirty days of approval. Full tuition and fees will be refunded in the event of cancellation of a student's enrollment because of an error on the part of the college. Any individual remaining enrolled may terminate the room and board agreement only under special circumstances approved by the Office of Student Life. The same schedules noted above will be used to determine the final bill for housing and board costs, as specified in the Room and Board Contract.

Outstanding Financial Obligations

Any outstanding financial obligation which a student owes to the college can prevent the student from registering for courses or making schedule adjustments after registration.

The following types of outstanding financial obligations can cause a financial hold to be placed on a student's record and stop registration transactions:

1. Any outstanding tuition, default on payment plans, late charges, write-offs or delinquent NDSL/Perkins loans and Peter Canisius loans;
2. Library — any late fines or replacement fees for books not returned;
3. Residence Life residence hall damage fees;
4. Koessler Athletic Center fees for lost or damaged equipment.

In order to clear a financial hold, a student must pay the obligation due at the appropriate office or make suitable payment arrangements with that office. A student must clear ALL financial holds in order to register for classes, make schedule changes, receive or send transcripts or view their transcripts online.

Governmental Programs

Students who attend Canisius College under the provision of Public Laws 16, 346, 550, or 894 and those under the sponsorship and benefits of other government agencies are subject to regulations governing certified papers from the Department of Veterans Affairs or other appropriate government agencies. They must present these papers to the Student Records and Financial Services Center.

Deferred Tuition Payments

Students desiring a tuition deferment or monthly installments in paying their tuition may enter into a Semester Payment Plan with the college. If

a student wishes to utilize the Semester Payment Plan, he/she must enroll in the plan by the due date on the bill. All Semester Payment Plans are subject to an administration fee and a penalty fee if the balance is not paid in full by the payment plan's final due date. Once enrolled in a Semester Payment Plan, the administration fee will be added to the tuition bill and the remaining balance is due in accordance with the terms of the agreed upon plan.

Full-Time Students

A full-time undergraduate student is one who is registered for at least 12 credit hours in a semester.

Part-Time Students

A part-time undergraduate student is one who is registered for less than 12 credit hours in a semester.

Undergraduate Tuition for Fall and Spring Semesters

Effective May 2019 through May 2020

Tuition	Per Semester	Per Year
Tuition for Undergraduate Students in All Curricula		
Full-time students (12-18 credit hours)	$13,970	$27,940
Part-time students	$900.00/ credit hour	
Undergraduate courses in excess of semester hours alloted to each curriculum	$900.00/ credit hour	
Tuition for Auditing Courses		
Audit	$450/credit hour	
Audit by Alumni & Parents of Students[1,2]	$60/course	
Audit by Senior Citizens (no course limit)[1,2]	$50.00/ semester	

1 On a space-available basis.

2 No fees, except for laboratory, are charged.

Housing Rates

Room Rates	Per Semester	Per Year
Bosch/Frisch — Double	$2,940.00	$5,880.00
Bosch/Frisch — Suite	$3,440.00	$6,880.00
Bosch/Frisch Corner Suite	$3,560.00	$7,120.00
Delavan Townhouses 2 & 3 person	$4,230.00	$8,460.00
Delavan Townhouses 4 & 5 person	$3,740.00	$7,480.00
Dugan Single	$3,945.00	$7,890.00
Dugan — Suite	$3,625.00	$7,250.00
Village Townhouses 5	$3,740.00	$7,480.00
Village Townhouses 2 Person	$4,230.00	$8,460.00

Meal Plan Options [1]

Board Rates	Per Semester	Per Year
Griffin A: 17 meals/week, $175 Griff Bucks, $25 Griff Choice	$2,823.00	$5,646.00
Griffin B: 225 meal blocks, $275 Griff Bucks, $25 Griff Choice	$2,823.00	$5,646.00
Griffin C: 200 meal blocks, $375 Griff Bucks, $25 Griff Choice	$2,823.00	$5,646.00
Ultimate Block: 175 meal blocks, $350 Griff Bucks, $25 Griff Choice	$2,640.00	$5,280.00
Supreme Block: 105 meal blocks, $450 Griff Bucks, $25 Griff Choice	$2,225.00	$4,450.00
Mega Block: 75 meal blocks, $550 Griff Bucks, $25 Griff Choice	$1,980.00	$3,960.00
Super Griff Bucks: 4 meal blocks, $650 Griff Bucks & $25 Griff Choice	$675.00	$1,350.00
Griff Bucks only (minimum deposit) (increase in $25 increments)	$25.00	
Griff Choice (minimum deposit)	$5.00	

1 A detailed description of each plan may be obtained from the Student Records & Financial Services Center. Freshmen residents must be on Griffin A, B, or C. Sophomores in Bosch, Frisch or Dugan must be on at least the Mega Block Plan. Juniors and seniors in Bosch, Frisch or Dugan must be on at least the Super Griff Buck Plan. Resident students not in Bosch, Frisch or Dugan, and commuter students, may choose any meal plan option. If a meal plan is purchased in the fall semester, it will automatically be re-billed in the spring semester, unless changed during the first week of the spring semester.

Fees for all Undergraduate Students

Student Activity Fee (provides partial support for various student activities including the NFTA CRAMpass)	
Full-time students	$218.00/semester
Part-time students	$20.00/flat rate
College Fee (including library, facilities use, and ID card)	
Full-time students	$284.00/semester
Part-time students	$15.00/credit hour
Technology Fee	
Full-time students	$112.00/semester
Part-time students	$10.00/credit hour
Wellness Fee	
Full-time students	$130.00/semester
Part-time students	$65.00/flat rate

Special Fees

Certain courses require additional fees that are associated with equipment, supplies, or specific activities within those courses. Some standard fees are listed below, although additional classes may also have fees associated with them (including travel).

Non-Collegiate Learning Assessment Program (NLAP) LLL 499	$200.00
Portfolio Assessor Fee	$100.00
EDU 122 Portfolio (covers 4 years)	$105.00
Laboratory and Course Fees (per course)	
Athletic Training Laboratories	$20.00
ACC 211	$30.00
Biology Laboratories	$65.00
Chemistry Laboratories (including breakage allowance)	$65.00
Conversation Lab Fee	$15.00
Education	$20.00
Modern Language	$25.00
Physics Laboratories	$60.00
Psychology	$20.00
Electronic Course Usage (where required, course of workbook is extra)	$225.00

Occasional Fees and Charges

Application Fee	$40.00
Diploma Reprint Fee	$30.00
Orientation Fee for All New Full-time Undergraduate Freshman Students	$275.00
Orientation Fee for All Undergraduate Transfer Students	$175.00
Late Payment Fee	$100.00 monthly ($300.00 max)
ID Card Late or Replacement Fee	$20.00
Returned Check Charges	$25.00
Parking Permit Fee	$35.00 - $120.00
Transcript of Records	N/C
Thesis Binding Fee	varies
Consortium Adminstration Fee	$350/semester
Tuition Remission and Exchange Program	varies
Study Abroad - Canisius Program	$500.00
Study Abroad - Non-Canisius Program	$750.00

Academics

- Curricular Information (p. 28)
- Academic Policies (p. 64)
- Student Records (p. 70)
- Advisement (p. 75)
- Griff Center for Academic Engagement (p. 76)
- Honors and Awards (p. 77)

Curricular Information

Summary of Curriculum for all Undergraduate Students

All undergraduate students must complete:

1. Either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45);
2. Major Requirements (see individual major requirements using the Undergraduate Majors A-Z (http://catalog.canisius.edu/undergraduate/majors/) listing); and
3. Electives (sufficient courses and credits to reach the minimum of 120 credits to graduate).

To determine how your courses fulfill curricular requirements you should run a GriffAudit. To run a GriffAudit go to the Canisius website (http://www.canisius.edu) and logon to myCanisius. Under "Online Tools," click on "Email, D2L, & Services." On the "Schedule and Registration" menu, click on select "Run My GriffAudit." If you have difficulty with this process or with the information, you should consult your advisor or someone in the Griff Center for Academic Engagement.

Credit Policy

Bachelor's Degree

A bachelor's degree requires the completion of a minimum of 120 credits. The number of actual courses and credits varies depending upon the particular program as described in this catalog. All Canisius credits, regardless of the number of credits earned for a course, count toward the fulfillment of the 120 total. In practice this means that students may combine one credit courses to make the equivalent of a three-credit free elective. A student may also combine unrelated laboratory credits to make free electives if that student has changed from a science to a non-science major. Any questions about the award of credits and their application to a degree can be directed to the Student Records and Financial Services Center or to an academic advisor. Additionally, students much complete a minimum number of liberal arts and sciences credits depending on the degree sought (60 credits for a bachelor of science and 90 credits for a bachelor of arts). This requirement is explained on our liberal arts and sciences requirement page (p. 54).

Associate's Degree

To earn a degree of associate of arts, a student must complete the required Core Curriculum courses, major courses, elective courses and a minimum of 60 credit hours. Additionally, students much complete 45 credits of liberal arts and sciences coursework for an associate of arts. This requirement is explained on our liberal arts and sciences requirement page (p. 54).

Attendance

Students are expected to attend all regularly scheduled classes, labs, and other course-related activities. Students are expected to accept personal responsibility for absences and are responsible for fulfilling all requirements and completing assignments in each course. However, on some occasions students may need to be absent. When possible, students should inform their instructors if they plan to be absent from class. Instructors are privileged to establish reasonable absence regulations, which should be clearly stated in the syllabus. The instructor is expected to determine when the number of absences has reached the level where any additional absences would prevent the student from attaining the objectives of the course.

Writing

Writing is a way of learning as well as a way of communicating. The development of skill and fluency in the written use of language is inseparable from the development of skill and fluency in thought. As part of their learning experiences, students should expect to write in a variety of modes, from class notes, diaries and poems to examination essays and research papers. Opportunities for writing are a feature of every course in the college. To help develop skill and fluency in writing of various kinds, students may seek assistance from the staff of the Tutoring Center.

Examinations

One purpose of examinations is to benefit students. Examinations make more memorable the structure and materials of the course, satisfy the need for definite goals and provide an opportunity to exercise knowledge and skill in the subject. They are experiences in which students can learn about the subject and themselves.

In their syllabi, instructors specify examinations of a kind and number that are, in their judgment, appropriate to the needs of the students and to the objectives and conditions of the course. Normally, a final exam is given in each course during the final exam period. An instructor who wishes to omit the final exam requires prior approval of their department chairperson. No final exams are to be administered during the final week of classes.

Academic Support Services

Students whose prior academic record or performance on placement examinations indicates that they will need additional help to succeed in their college work will be placed into special sections or courses that are designed to assist them in their future course of studies. Students may also be advised to take special courses or sections if their performance in the first year indicates such special attention may be helpful. When necessary, the college, working through the Griff Center for Academic Engagement and the various departments, may require that such courses be taken.

Undergraduate Degrees

Canisius College offers undergraduate curricula leading to the degrees of Bachelor of Arts (BA), Bachelor of Science (BS), and Associate of Arts (AA) in the majors and/or concentrations as listed below. Each program is listed with the official approved title and HEGIS number by which it is registered with the New York State Education Department. Enrollment in programs other than those that are registered or otherwise approved may jeopardize a student's eligibility for certain student-aid awards. The programs are as follows:

Arts and Sciences - Associate of Arts Degree

Humanities	5649.00
Social Sciences	5622.00

Arts and Sciences — Bachelor of Arts Degree

Classics	1504.00
Communication Studies	0601.00
Creative and Performing Arts Interdisciplinary Studies	1001.00
Creative Writing	1507.00
English	1501.00
Environmental Studies	2299.00
European Studies	0310.00
History	2205.00
Humanities	4903.00
Integrated Marketing Communication	0699.00
International Relations	2210.00
Mathematics	1701.00
Philosophy	1509.00
Physics	1902.00
Political Science	2207.00
Psychology	2001.00
Religious Studies	1510.00
Sociology	2208.00
Spanish	1105.00
Urban Studies	2214.00

Arts and Sciences — Bachelor of Science Degree

Animal Behavior, Ecology and Conservation	0407.00
Biochemistry	0414.00
Biology	0401.00
Chemistry	1905.00
Clinical Laboratory Science	1223.00
Computer Science	0701.00
Criminal Justice	2105.00
Digital Media Arts	0605.00
Environmental Science	0420.00
Journalism	0602.00
Physics	1902.00
Psychology	2001.00
Social Sciences-General	2201.00
Specialized Studies	4903.00

Education and Human Services — Bachelor of Arts Degree

Adolescence Education	0803.00
Biology "7-12"	0401.01
Chemistry "7-12"	1905.01
English "7-12"	1501.01
Mathematics "7-12"	1701.01
Physics "7-12"	1902.01
Social Studies "7-12"	2201.01
Spanish "7-12"	1105.01

Education and Human Services — Bachelor of Science Degree

Childhood (1-6) Education/TESOL (K-12)	0802.00
Health and Wellness	1299.30
Human Services	2101.00
Physical Education	0835.00

Physical Education/Health Education	0835.00
Professional and Technical Studies	4999.00
Special Education/Early Childhood	0808.00
Special Education/Childhood Education	0808.00
Sport and Exercise Health Care	1299.00
Sport Management	0599.00

Wehle School of Business - Bachelor of Arts Degree

Economics	2204.00

Wehle School of Business – Bachelor of Science Degree

Accounting	0502.00
Professional Accounting (150 hour Program)	0502.00
Accounting Information Systems	0502.00
Business Economics	0517.00
Entrepreneurship	0506.00
Finance	0504.00
International Business	0513.00
Management	0506.00
Marketing	0509.00

Pre-Professional Programs

Canisius College offers pre-professional training for students wishing to pursue a graduate degree in a number of professions. More detail is available in the pre-professional programs page (p. 56) of the catalog. Programs and/or concentrations are available in the following areas:

- Pharmacy 2+4[1]
- Osteopathic Medicine[1]
- Dental Medicine[1]
- Pre-Medicine
- Pre-Dentistry
- Pre-Law
- Pre-Veterinary
- Pre-Pharmacy
- Pre-Engineering

[1] Joint Degree Program

Undergraduate Dual Degree Programs

Canisius College offers 3+2 Dual Degree Program in Physics and Engineering with the University at Buffalo (UB), and a dual degree program in physics and engineering with Pennsylvania State University at Erie, The Behrend College.

Students begin the program at Canisius and complete three years, or the equivalent, studying liberal arts courses in addition to pre-engineering courses in the basic sciences. Upon completion of the first three years and with a recommendation from Canisius, students then enter University at Buffalo or Pennsylvania State for two years to complete the engineering courses required there, with articulation agreements in place to ensure a smooth transfer process.

Students who complete one of the dual degree programs receive two bachelor's degrees, one from Canisius in physics, and one in an engineering discipline (UB – Chemical, Civil, Electrical, Industrial, Mechanical, Aerospace and Penn State — Mechanical) from the partner school.

Dual Degree Programs

Canisius College also offers Dual Degree programs in a number of areas. These programs allow for the completion of a bachelor's degree in four years, followed by a master's degree in approximately one year. These programs are as follows:

- A Dual Degree program leading to a Master of Business Administration degree is offered for students majoring in business and a number of majors in the College of Arts and Sciences.
- A Dual Degree program leading to a Master of Business Administration degree in Accounting to students majoring in Accounting. This dual degree program meets the requirement for 150 hours for certification as a NYS CPA (certified public accountant).
- A Dual Degree program leading to a Masters of Science in Education (MSEd) for students who major in Biology, English, History,

Core Curriculum

Core Curriculum Mission

The purpose of the Canisius College Core Curriculum is to ensure that a Canisius student's education equips them with intellectual tools to be intelligent and effective men and women for and with others, who are also better able to seek God in all things, in our contemporary world.

Such tools are acquired and developed through a broad education in the liberal arts - humanities, social sciences, and natural & mathematical sciences - with a focus on exposing students to the richness of human diversity, both in the United States and abroad, and a theoretical and practical understanding of individual and social responsibility in the cause of justice for all.

The content and structure of our Core Curriculum is rooted in the humanistic ideals of the Catholic intellectual tradition and in Jesuit pedagogy and mission. This is demonstrated in our Core's emphases on academic excellence, the dialogue of faith and reason, and service to humanity, most especially the poor and marginalized of the world. The Core also seeks to engage Canisius students with the spiritual dimension of life - in others and in themselves - in the hope that this will enable them to seek God in all things and so to develop a deeper and richer solidarity with all of God's people and creation.

At the same time, the Core Curriculum seeks to develop a student's skills in writing, oral communication, information literacy, and critical thinking - all of which are essential for success in life regardless of the profession one chooses to pursue.

More information about the core is available on the Academic Affairs Website (https://www.canisius.edu/academics/academic-affairs/core-curriculum/).

DESCRIPTIONS OF CORE CURRICULUM COMPONENTS

The Core Curriculum contains the following components: (1) Foundations courses, (2) Breadth of Knowledge (Field) courses, (3) Cross-Disciplinary Knowledge Attribute courses, (4) Cross-Disciplinary Skill courses, and (5) a Core Capstone.

Foundation Courses

The Core Curriculum provides a foundation of four courses: ENG 111 (Academic Writing), ENG 112 (Writing About Literature), PHI 101 (Introduction to Philosophy), and RST 101 (Introduction to Religious Studies).

These courses, usually completed during the first year, comprise the basic starting point for a humanistic education in the Catholic, Jesuit tradition. Here, students will be introduced to the practices of academic reading and writing, information literacy, critical thinking, and communication. Further, students will have their first academic experience at Canisius of the concerns that are definitive of our Catholic, Jesuit Core: Diversity, Ethics, Global Awareness, and Justice. Please click on the Learning Goals tab above for a list of the learning goals and objectives for each Foundation course.

- **ENG 111: Academic Writing**
  This course emphasizes the production of academic writing through critical analysis of texts from different topics. These courses are intended to be seminar style with reading and discussion appropriately challenging for first-year students. The motivating goal is that students learn to write to enhance learning, find and evaluate information, practice academic integrity, negotiate the process of revision, and use correct grammar and syntax.
- **ENG 112: Writing about Literature**
  This course develops strategies for reading and writing about literature — e.g., poetry, drama, fiction, literary essays — from a variety of cultural traditions. The motivating goal is that students come to understand and interpret primary literary texts, develop writing skills, and develop and organize interpretive essays through the use and evaluation of sources. ENG 112 courses have a significant component devoted to writing instruction and developing information literacy. Students undertake appropriate research activities, write at least 15 pages of polished prose, and revise their writing exercises.
- **PHI 101: Introduction to Philosophy**
  This course acknowledges the special place of philosophy - the study of ultimate questions of existence, value, and meaning - in Catholic, Jesuit education. PHI 101 provides a thoughtful examination of philosophical issues, including those of ethics and/or justice, with a concern that students learn to use logical and critical analysis to understand the claims and arguments proposed by classical and contemporary philosophers, including some in the Catholic philosophical tradition.
- **RST 101: Introduction to Religious Studies**
  This course acknowledges the special place of studying religion - systems of thought and practice concerning humans' relationship with the transcendent - in Catholic, Jesuit education. RST 101 provides an academic introduction to religion in general, with a concern that students understand the nature and role of religion, religious experience, and religious practice in human life and society, including Catholic (and Jesuit) traditions as well as other world religions.

Breadth of Knowledge (Field) Courses

The Core Curriculum includes a distribution of courses, one in each of *seven* Breadth of Knowledge Fields, meant to encompass the traditional liberal arts: Religious Studies and Theology (Field 1), Philosophy (Field 2), Literature and the Arts (Field 3), History (Field 4), Social Sciences (Field 5), Natural Sciences (Field 6), and Mathematical Sciences (Field 7).

Taken together, these courses provide students with a better understanding of the variety of disciplinary norms, specific to each Field, according to which knowledge claims are judged. Ideally, students will become better able to analyze both their inner lives and the world outside themselves from a variety of angles, equipping them to understand better the depth and nuance of the human experience. Please click on the Curriculum tab above for a list of courses that count for each Field. Please click on the Learning Goals tab above for a list of the learning goals and objectives for each Field.

NOTE: A course can have only one Breadth of Knowledge (Field) designation. However, some courses also will count for one Cross-Disciplinary Knowledge Attribute and/or one Cross-Disciplinary Skill. (For example, one course cannot count for both Field 1 and Field 2 credit; but one course may count for Field 1, Ethics, and Advanced Writing-Intensive credit.) Also, these Core courses can count for major / minor / program credit.

- **Field 1: Religious Studies and Theology**
  Ideally building on RST 101, Field 1 courses enable students to gain a clearer understanding of the role that religion plays in human life through a careful and systematic examination of religious ideas, institutions, values, or patterns of belief and practice.
- **Field 2: Philosophy**
  Ideally building on PHI 101, Field 2 courses enable students to understand, articulate, and evaluate the values, principles, and assumptions on which individual and social decisions rest.
- **Field 3: Literature and the Arts**
  Ideally building on ENG 111 and/or ENG 112, Field 3 courses enable students to understand the aesthetic dimension of creative work in the fine arts and/or literature and to articulate how that creative work mirrors and shapes human experience.
- **Field 4: History**
  Field 4 courses enable students to understand how historians use evidence to study the recorded past, to situate events, artifacts, and experiences in their historical context, and to analyze the process of change over time.
- **Field 5: Social Sciences**
  Field 5 courses enable students to explain, interpret, and critically analyze human behavior and social structures from the perspective of the social sciences and their methods.
- **Field 6: Natural Sciences**
  Field 6 courses enable students to explain, interpret, and critically analyze the natural world using the scientific method from the perspectives of the various natural sciences.
- **Field 7: Mathematical Sciences**
  Field 7 courses enable students to reason quantitatively, abstractly, or computationally about the world using the symbol systems rooted in quantitative measures, logical analysis, and/or algorithms to solve practical problems.

Cross-Disciplinary Knowledge Attribute Courses

The Core Curriculum includes courses focused on each of four areas central to a Catholic, Jesuit education, particularly in contemporary times: Diversity, Ethics, Global Awareness, and Justice.

Taken together, these courses build upon concepts and content from students' Foundations courses to help them develop a well-educated solidarity, most especially for the poor and marginalized both here and abroad as our mission and identity compels us. Further, they help students

to understand the principles that justify various conceptions of individual and social responsibility. Ideally, this education for justice will help students become more aware of where and how they should act to bring about a more truly just world. Please click on the Curriculum tab above for a list of courses that count for each Knowledge Attribute. Please click on the Learning Goals tab above for a list of the learning goals and objectives for each Knowledge Attribute.

NOTE: A course can have only one Cross-Disciplinary Knowledge Attribute designation. However, some courses also will count for one Breadth of Knowledge (Field) and/or one Cross-Disciplinary Skill. (For example, one course cannot count for both Ethics and Global Awareness credit; but one course may count for Field 3, Global Awareness, and Oral Communication credit.) Also, these Core courses can count for major / minor / program credit.

- **Diversity**
  Courses with a Diversity attribute enable students to develop an understanding of the multicultural character of the United States by paying attention to cultural differences within the United States that impact people's experiences of life in this country. This focal concern is grounded on the assumption that a well-educated person should have the intellectual tools and broad perspectives for critically examining their own communities and values, the communities and values of other peoples, especially the poor and marginalized, and the places and issues where these things intersect. Ideally, students will become better able to understand how others view their own communities and values, and will be more adept at creating an authentic culture of encounter in their communities.
- **Ethics**
  Courses with an Ethics attribute enable students to develop a thorough understanding of ultimate value in terms of human agency, happiness, and living well. Special attention will be given to the various theoretical frameworks that make living well intelligible, personally and professionally. This focal concern is grounded on the assumption that an understanding of ethics is an integral part of self-understanding, self-reflective action, and the principled development of one's conscience and character. Ideally, students will become better able to examine their values critically, discern more accurately what moral rectitude demands of them in their actions, and facilitate constructive dialogue with those whose conceptions of fundamental right and wrong differ in principled ways.
- **Global Awareness**
  Courses with a Global Awareness attribute enable students to develop an awareness of nations, countries, regions, communities, cultures, peoples, and histories outside of the United States. This focal concern is grounded on the assumption that we live in an essentially interconnected world, and that well-educated students ought to have the intellectual tools to comprehend global events and their implications on more localized concerns. Ideally, students will become better able to contextualize their own choices within their appropriate global context and keep the interconnectedness of our world before their minds as they make decisions in their personal and professional lives.
- **Justice**
  Courses with a Justice attribute enable students to develop an understanding of justice, including various conceptions of rights and the right ordering of societies, the tensions between justice and power, and the direct and structural causes of various injustices. This focal concern is grounded on the assumptions that all have a responsibility to help to create an ever more just world and that developing one's understanding of such things will help one to envision how best to fulfill this responsibility. Ideally, students will become better able to understand the grounds for their social and societal responsibilities and facilitate constructive dialogue with those whose conceptions of justice and injustice differ in principled ways

Cross-Disciplinary Skills Courses

The Core Curriculum includes two courses focused on developing students' abilities at communication - one in Writing (Advanced Writing-Intensive) and one in Oral Communication. Development in both of these is undeniably critical for personal and professional success and well-being, especially nowadays as life in the contemporary world requires sensitive and skillful communication with those of widely different backgrounds, experiences, and values.

Taken together, these courses build upon concepts and content from students' Foundations courses to help them develop intellectual habits of speech, writing, and thought that will complement the growth in knowledge and maturity students experience across their Core experience and within their major(s) and/or minor(s). Ideally, students' development as effective communicators will help them maintain a sense of community with their interlocutors, as well as help them craft consensus in an increasingly complex world. Please click on the Curriculum tab above for a list of courses that count for each Skill. Please click on the Learning Goals tab above for a list of the learning goals and objectives for each Skill.

NOTE: A course can have only one Cross-Disciplinary Skill designation. However, some courses also will count for one Breadth of Knowledge (Field) and/or one Cross-Disciplinary Knowledge Attribute. (For example, one course cannot count for both Advanced Writing-Intensive and Oral Communication credit; but one course may count for Field 5, Diversity, and Oral Communication credit.) Also, these Core courses can count for major / minor / program credit.

- **Advanced Writing-Intensive**
  Courses with an Advanced Writing-Intensive designation provide significant emphasis on using writing as a way to learn. The focal concern is that students participate in the process of drafting, re-writing, and editing at an advanced level, with extensive commentary and assistance from instructors.
- **Oral Communication**
  Courses with an Oral Communication designation enable students to develop abilities to communicate effectively and appropriately in a range of contexts, including face-to-face engagements and group presentations.

Core Capstone

The Core Curriculum concludes with a Core Capstone, which students should take upon completion of all the other core components, usually in senior year or the second semester of junior year. In this course, students will have an opportunity to recall, reflect upon, and synthesize what they have learned from their Core classes, especially those bearing Knowledge Attributes.

This completes an arc of development in their education at Canisius that started in their Foundation courses, but also sets them up to be lifelong learners beyond their time at Canisius with a special concern for the themes emphasized in the Core. To illustrate the integral unity of the definitive themes of the Core, Capstones will focus on how the themes of the Knowledge Attributes are interconnected and addressed within a particular subject - which may be a subject close to a student's major field of study. Further, students will be able to engage in enriching dialogue with fellow classmates who have had different experiences of the Core up to that point. Ideally, a student will be able to trace how their understanding of the elements of their Core experience has developed and will be inspired to continue to keep such matters in the forefront of their minds in whatever

they do after graduation. Please click on the Curriculum tab above for a list of courses that count for the Capstone. Please click on the Learning Goals tab above for a list of the learning goals and objectives for the Capstone. *NOTE: There are rare instances in which Capstone courses can count for major / minor / program credit. Please consult with your major / minor / program advisor.*

Courses in the Core Curriculum

Please note that the list of courses provided below is current as of fall 2018, but is subject to change. Courses are sometimes added to the list of courses in each of the Core Fields and/or Attributes and/or Skills. Additionally, courses are sometimes removed from the Core Fields and/or Attributes and/or Skills if they no longer fulfill the expectations of the core. That said, **any course used by a student to fulfill a Core requirement must be designated as a Core Field and/or Attribute and/or Skill course in the semester in which the student takes that class.** The most recent information for a given course in a given semester is available in "Look Up Classes," which is accessible via my.canisius.edu during the registration process.

If you have any questions about whether a particular course counts for Core Credit, please consult with the instructor of the course and/or the Director of the Core Curriculum.

Foundations

Code	Title	Credits
Students must take each of the following classes:		
ENG 111	Academic Writing	3
ENG 112	Writing about Literature	3
PHI 101	Introduction to Philosophy	3
RST 101	Introduction to Religious Studies and Theology	3

Field 1 (Religious Studies and Theology)

Code	Title	Credits
Students must choose one class that fulfills Field 1, which currently includes the following:		
CLS 308	Pagans and Christians	3
CLS 309	Greek and Roman Religion	3
HIS 302	Life and Theology in Colonial Atlantic	3
HIS 306	American Religious Experience	3
IGSR 300	Immersion East Side Seminar	3
IGSR 302	Jesuits in Argentina	3
RST 200	Introduction to the Hebrew Bible	3
RST 201	Introduction to the New Testament	3
RST 219	History of Eastern Orthodox Christianity	3
RST 220	Introduction to Eastern Religions	3
RST 221	Native American Religions	3
RST 224	Islam: Tradition and Revival	3
RST 229	Religious Perspectives on Animals	3
RST 230	Catholic Belief Today	3
RST 231	Introduction to Catholic Studies	3
RST 234	Christians (En) Countering Injustice	3
RST 237	Images of Jesus in Film and Art	3
RST 240	Development of Jewish Religious Thought and Practice	3
RST 304	Women, Gender, and Religion: Judaism, Christianity, Islam	3
RST 312	Race, Ethnicity, and the New Testament	3
RST 314	New Testament in Literature and Art	3
RST 324	Biblical Archaeology	3
RST 325	Early Christianity	3
RST 327	Modern Global Christianity	3
RST 340	Moral Issues Today	3
RST 341	Catholic Social Ethics: Theological Perspectives	3
RST 345	Bio-Moral Problems	3
RST 347	Ecotheology	3
RST 355	The Problem of Suffering	3
RST 360	Magic, Science and Religion	3

Field 2 (Philosophy)

Code	Title	Credits
Students must choose one class that fulfills Field 2, which currently includes the following:		
HIS 347	The History of Marxism	3
HIS 348	Twentieth Century Marxism	3
PHI 211	Philosophy of Religion	3
PHI 225	Logic	3
PHI 240	Justice	3
PHI 241	Ethics: Traditions in Moral Reasoning	3
PHI 242	Ethical Issues in Business	3
PHI 243	Bio-Medical Ethics	3
PHI 244	Environmental Ethics	3
PHI 245	Animal Ethics	3
PHI 246	Ethics of Technology	3
PHI 247	Food and Agricultural Ethics	3
PHI 252	Happiness, Virtue and the Good Life	3
PHI 261	Philosophy of Law	3
PHI 264	Justice & the Environment: The Problem of Climate Change	3
PHI 267	Faith, Reason, and Justice Catholic Social Thought	3
PHI 271	Philosophy of Human Rights	3
PHI 272	Gender and Philosophy	3
PHI 273	Race and Philosophy	3
PHI 274	Social and Political Philosophy	3
PHI 275	Global Feminisms	3
PHI 285	Black Philosophy	3
PHI 286	Latin American Philosophy	3
PHI 291	Philosophy of Art	3
PHI 292	Philosophy of Beauty	3

Field 3 (Literature and the Arts)

Code	Title	Credits
Students must choose one class that fulfills Field 3, which currently includes the following:		
CLL 206	Latin Poetry: Catullus	3
CLS 205	Ancient Greece: Culture and Society	3
CLS 206	Ancient Rome: Culture and Society	3
CLS 207	Mythology and Literature	3
CLS 214	Greek and Roman Tragedy	3

CLS 301	Culture and Crisis in Rome: The Final Decades of the Roman Republic	3
DMA 201	Introduction to Digital Media	3
DMA 213	3D Graphics	3
DMA 214	Digital Design Concepts	3
DMA 310	Digital Audio/Music Production	3
ENG 201	Poetry	3
ENG 202	Drama	3
ENG 211	Science Fiction and Fantasy	3
ENG 213	Word and Image	3
ENG 216	Literature and Business	3
ENG 217	Law and Literature	3
ENG 218	Literature and Medicine	3
ENG 219	Literature and Psychology	3
ENG 223	Images of Women in Literature and Film	3
ENG 224	The Journey in World Literature	3
ENG 225	The Journey in American Literature	3
ENG 233	The Quest in Medieval Literature	3
ENG 285	Animals in Film and Literature	3
ENG 294	Introduction to Creative Writing	3
ENG 368	Native American Literature	3
ENG 369	Contemporary American Fiction	3
ENG 375	US Cold War Culture and Counterculture	3
ENG 382	African American Literature	3
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 102	Altarpieces, Academies & the Avant-Garde	3
FAH 103	Survey of Pre-Columbian and Native American Art	3
FAH 107	Introduction to African and Asian Art	3
FAH 109	History of Architecture	3
FAH 110	History of Photography	3
FAH 159	Gender, Identity, and Art	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 213	Greek and Roman Art	3
FAH 224	Medieval Art	3
FAH 245	Renaissance Art	3
FAH 248	Baroque Art	3
FAH 261	Monet and the Age of Impressionism	3
FAH 262	Modern Art	3
FAH 265	Contemporary Art	3
FAH 266	Modern Architecture	3
FAH 267	Frank Lloyd Wright	3
FAH 271	Art in Buffalo	3
FAH 272	Animals in Art	3
FAM 115	Fundamentals of Music	3
FAM 119	Masterpieces of Music	3
FAM 122	History of Rock and Roll	3
FAM 123	World Musics	3
FAM 124	America's Music	3
FAM 212	Canisius and the BPO Experience	3
FAM 213	Women in Music	3
FAM 214	Music in Film	3
FAM 216	Medieval and Renaissance Music	3
FAM 217	Music of the Baroque Period	3
FAM 218	Music of the Classical Period	3
FAM 219	19th Century Music	3
FAM 220	Art Music from 1900 to the Present	3
FAM 221	Opera Workshop I	3
FAM 222	Opera Workshop II	3
FAM 223	The World of Music Theater	3
FAM 224	Afro-Centric Music	3
FAM 230	Music Theory I	3
FAM 255	Diction for Singers	3
FAS 110	Two-Dimensional Design	3
FAS 120	Drawing I	3
FAS 130	Three-Dimensional Design	3
FAS 131	Sculpture I	3
FAS 140	Introduction to Still Photography	3
FAS 141	Digital Photography	3
FAS 142	Travel Photography	3
FAS 150	Color	3
FAS 160	Printmaking I	3
FAS 170	Studio Painting I	3
FAS 222	Figure Drawing I	3
HIS 387	Representations of the Holocaust in Film, Literature, Art and Music	3
SPA 336	Latin@s in the US: Latino Literature and Film	3

Field 4 (History)

Code	Title	Credits
Students must choose one class that fulfills Field 4, which currently includes the following:		
CLS 103	Greek History	3
CLS 104	Roman History	3
EVST 259	Environmental History of the United States	3
FRC 326	Threads: weaving industry, culture, and commerce through the history of textiles.	3
HIS 106	The Medieval World	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 110	History of Asia Since 1800	3
HIS 111	Men and Ideas in History	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3
HIS 124	History of the United States: 1877 to the Present	3
HIS 126	America's Story II: The Later Years	3
HIS 131	Latin American History to 1830	3
HIS 132	Latin American History since 1830	3
HIS 201	United States Military History	3
HIS 203	Castles, Bones and Battleaxes: Material Culture of the Medieval World	3
HIS 204	Soccer in Global History	3
HIS 211	Women In The Western World	3
HIS 213	Twentieth Century Europe	3
HIS 220	The History of Food	3

HIS 226	History of Ireland	3
HIS 229	The Violent Century in Films	3
HIS 230	The Holocaust in Historical Perspective	3
HIS 235	From Jamestown to Yorktown: Making the United States	3
HIS 236	From Washington to Lincoln: The Making of American Democracy	3
HIS 251	Sport in America	3
HIS 255	African American History	3
HIS 260	Canada and the World	3
HIS 263	Wars of Latin America	3
HIS 280	The Making of Modern Africa	3
PSC 111	Western Political Tradition	3

Field 5 (Social Sciences)

Code	Title	Credits
Students must choose one class that fulfills Field 5, which currently includes the following:		
ANT 122	Sociocultural Anthropology	3
ANT 230	Introduction to Archaeology	3
ATH 361	Psychology of Sport and Mental Health	3
CLS 209	Greek and Roman Archaeology	3
CLS 211	Archaeology of Pompeii	3
CLS 212	Borders, Walls, and Immigrants in the Ancient World	3
CLS 219	Animals in the Ancient World	3
CLS 300	Roman Law and Society	3
COM 204	Interpersonal Communication	3
COM 205	Mass Communication and Society	3
COM 304	Family Communication	3
CRJ 227	Criminal Justice I	3
DMA 215	Digital Media Culture	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
EDE 100	Human Growth and Development - Birth through Childhood	3
EDS 101	Human Growth and Social Development: Adolescence	3
EDU 100	Exploring the Teaching Profession	3
EVST 250	Nature, Culture and Interpretation	3
EVST 275	Global Environmental Problems	3
HED 361	Psychology of Sport and Mental Health	3
HSV 301	Social Policies	3
PSC 103	The American Constitution	3
PSC 104	American Political Process	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
PSC 224	Congress and the Legislative Process	3
PSC 241	Human Rights and Globalization	3
PSC 242	International Organizations	3
PSC 250	Politics in Latin America	3
PSC 336	Urban Government and Politics	3
PSC 345	Transnational Crime After 9/11	3
PSC 355	European Union	3
PSC 360	Political Economy of the Developing World	3
PSC 370	Domestic Conflicts & Peace	3
PSY 102	Introduction to Psychology II	3
PSY 380	Science and Pseudoscience in Psychology: Thinking Critically	3
SOC 110	Introduction to Sociology	3
SOC 111	Contemporary Social Problems	3
SOC 234	Environment and Society	3
SOC 273	Social Movements and Social Change	3
SOC 291	Gender and Society	3
SOC 341	Race and Ethnic Relations	3
SPMT 320	Psychology of Sport	3
WST 201	Introduction to Women and Gender Studies	3

Field 6 (Natural Sciences)

Code	Title	Credits
Students must choose one class that fulfills Field 6, which currently includes the following		
ANT 121	Biological Anthropology	3
BIO 109	Nutrition	3
BIO 111	Introductory Biology I	3
BIO 114	Human Biology: Introduction to Human Anatomy and Physiology	3
BIO 116	Disease: Myth and Reality	3
BIO 120	Biology in the News	3
BIO 132	Genes and People	3
BIO 166	Biology of Birds	3
BIO 221	Biology of Women	3
CHM 104	Energy, Environment, and Society	3
CHM 109	General Chemistry I with Review - Part I	3
CHM 111	General Chemistry I	3
CHM 112	General Chemistry II	3
EVST 110	Science of Environmental Problems I	3
EVST 111	Science of Environmental Problems II	3
GEO 325	Introduction to Physical Geography	3
GEOL 120	Introductory Geology	3
PHY 129	Introduction to Astronomy	3
PHY 131	Earthquakes: Seismology and Society	3
PHY 201	College Physics I	3
PHY 223	General Physics for Physical Science Majors I	3

Field 7 (Mathematical Sciences)

Code	Title	Credits
Students must choose one class that fulfills Field 7, which currently includes the following:		
ATH 398	Statistics and Research Design	3
CSC 108	Introduction to Web Computing	3
CSC 111	Introduction to Programming	3
MAT 105	Finite Mathematics	3
MAT 106	Calculus for the Non-Sciences	3
MAT 108	Precalculus for Sciences	3
MAT 109	Calculus with Review I	4
MAT 111	Calculus I	4

MAT 115	Calculus for Business	4
MAT 121	Mathematics through History	3
MAT 131	Statistics for Social Sciences	3
MAT 141	Inferential Statistics and Computers for Science	4
MAT 150	Mathematics and Politics	3
MAT 161	Mathematics for Elementary Teachers	3

Advanced Writing-Intensive

Code	Title	Credits
Students must choose one class that fulfills the Advanced Writing-Intensive attribute, which currently includes the courses below. (Note that many of these courses also fulfill one of the Breadth of Knowledge Fields; some may also fulfill one of the Cross-Disciplinary Attributes).		
ABEC 332	Animal Welfare	3
ABEC 340	Research Methods in Animal Behavior	3
ABEC 360	Observational Research Methods	4
ANT 341	Environmental Anthropology	3
ANT 350	Business Anthropology	3
ANT 355	Sociolinguistics	3
BCH 403L	Molecular Biology Laboratory	1
BIF 400	Bioinformatics Senior Seminar	3
BIO 312	Primatology	3
BIO 404L	Genetics Laboratory	1
BIO 432	Developmental Biology	3
CHM 301L	Fundamental Physical Chemistry Laboratory	1
CLS 301	Culture and Crisis in Rome: The Final Decades of the Roman Republic	3
COM 203	Writing for the Public Media	3
CRJ 455	Criminology	3
CSC 320	The Social Impact of Computing	3
EDS 223	Foundations of Adolescent Literacy	3
ENG 201	Poetry	3
ENG 202	Drama	3
ENG 205	Varieties of the Essay	3
ENG 218	Literature and Medicine	3
ENG 219	Literature and Psychology	3
ENG 223	Images of Women in Literature and Film	3
ENG 224	The Journey in World Literature	3
ENG 225	The Journey in American Literature	3
ENG 233	The Quest in Medieval Literature	3
ENG 285	Animals in Film and Literature	3
ENG 294	Introduction to Creative Writing	3
ENG 383	Advanced Academic Writing	3
ENG 385	Rhetoric and Composition	3
ENG 389	Business Communication	3
FAH 272	Animals in Art	3
HIS 299	Historian's Craft	3
HIS 299C	Hist Craft: Stalinism	3
HIS 411	History Honors Thesis	3
PED 372	Seminar in Kinesiology	3
PHY 350	Modern Physics Laboratory	1
PHY 449	Nuclear Physics Lab	1
PSC 242	International Organizations	3
PSC 370	Domestic Conflicts & Peace	3
RST 230	Catholic Belief Today	3
RST 231	Introduction to Catholic Studies	3
RST 341	Catholic Social Ethics: Theological Perspectives	3
SPMT 480	Research Methods in Sport	3

Oral Communication

Code	Title	Credits
Students must choose one class that fulfills the Oral Communication attribute, which currently includes the courses below. (Note that many of these courses also fulfill one of the Breadth of Knowledge Fields; some may also fulfill one of the Cross-Disciplinary Knowledge Attributes).		
BIO 353	Biology Seminar II	1
CHM 481	Communicating Research Literature	1
CLS 214	Greek and Roman Tragedy	3
CLS 300	Roman Law and Society	3
CLS 309	Greek and Roman Religion	3
COM 201	Oral Communication	3
COM 319	Training and Development	3
CRJ 280	Language for Legal Professions	3
EDS 432	Applied Methods of Teaching English: Adolescence	3
EDS 433	Applied Methods of Teaching Mathematics: Adolescence	3
EDS 434	Applied Methods of Teaching Modern Languages: Adolescence	3
EDS 435	Applied Methods of Teaching Science: Adolescence	3
EDS 436	Applied Methods of Teaching Social Studies	3
ENG 147	Acting I	3
ENG 148	Acting II	3
ENG 350	The Theater Experience	3
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 213	Greek and Roman Art	3
HIS 126	America's Story II: The Later Years	3
HIS 331	British Monarchy	3
MAT 480	Mathematics Seminar	1
MLS 201	Foundations of Leadership	3
MLS 401	Mission Command and the Army Profession	3
MLS 402	Mission Command and the Company Grade Officer	3
PED 441	Teaching Methods in Physical Education	3
PHY 351	Advanced Laboratory	1
PSC 224	Congress and the Legislative Process	3
PSC 355	European Union	3
RST 347	Ecotheology	3
SPE 432	Seminar in Teaching and Assessment	3
SPMT 430	Sport Communications	3

Global Awareness

Code	Title	Credits
Students must choose one class that fulfills the Global Awareness attribute, which currently includes the courses below. (Note that many of these courses also fulfill one of the Breadth of Knowledge Fields; some may also fulfill one of the Cross-Disciplinary Skills).		
ANT 122	Sociocultural Anthropology	3
ANT 230	Introduction to Archaeology	3
ANT 341	Environmental Anthropology	3
ANT 350	Business Anthropology	3
CHM 104	Energy, Environment, and Society	3
CLS 103	Greek History	3
CLS 104	Roman History	3
CLS 205	Ancient Greece: Culture and Society	3
CLS 206	Ancient Rome: Culture and Society	3
CLS 209	Greek and Roman Archaeology	3
CLS 211	Archaeology of Pompeii	3
CLS 212	Borders, Walls, and Immigrants in the Ancient World	3
CLS 219	Animals in the Ancient World	3
CLS 308	Pagans and Christians	3
CLS 309	Greek and Roman Religion	3
CLS 311	Alexander the Great	3
ECO 460	International Trade	3
ENG 224	The Journey in World Literature	3
ENG 381	Postcolonial Literature	3
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 102	Altarpieces, Academies & the Avant-Garde	3
FAH 107	Introduction to African and Asian Art	3
FAH 109	History of Architecture	3
FAH 110	History of Photography	3
FAH 159	Gender, Identity, and Art	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 224	Medieval Art	3
FAH 245	Renaissance Art	3
FAH 248	Baroque Art	3
FAH 261	Monet and the Age of Impressionism	3
FAH 262	Modern Art	3
FAH 265	Contemporary Art	3
FAH 266	Modern Architecture	3
FAM 119	Masterpieces of Music	3
FAM 123	World Musics	3
FAM 212	Canisius and the BPO Experience	3
FAM 216	Medieval and Renaissance Music	3
FAM 217	Music of the Baroque Period	3
FAM 218	Music of the Classical Period	3
FAM 219	19th Century Music	3
FAM 224	Afro-Centric Music	3
FRC 326	Threads: weaving industry, culture, and commerce through the history of textiles.	3
HIS 106	The Medieval World	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 110	History of Asia Since 1800	3
HIS 131	Latin American History to 1830	3
HIS 132	Latin American History since 1830	3
HIS 211	Women In The Western World	3
HIS 213	Twentieth Century Europe	3
HIS 220	The History of Food	3
HIS 226	History of Ireland	3
HIS 260	Canada and the World	3
HIS 263	Wars of Latin America	3
HIS 280	The Making of Modern Africa	3
MAT 121	Mathematics through History	3
MKT 375	International Marketing	3
PED 203	Lifetime and Fitness Activities	3
PED 204	Games and Sports	3
PHI 211	Philosophy of Religion	3
PHY 131	Earthquakes: Seismology and Society	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
PSC 241	Human Rights and Globalization	3
PSC 242	International Organizations	3
PSC 270	Information Literacy in the 21st Century: Facing Borders	3
PSC 345	Transnational Crime After 9/11	3
PSC 355	European Union	3
RST 200	Introduction to the Hebrew Bible	3
RST 219	History of Eastern Orthodox Christianity	3
RST 220	Introduction to Eastern Religions	3
RST 224	Islam: Tradition and Revival	3
RST 360	Magic, Science and Religion	3
SPMT 440	Global Perspective in Sport	3

Justice

Code	Title	Credits
Students must choose one class that fulfills the Justice attribute, which currently includes the courses below. (Note that many of these courses also fulfill one of the Breadth of Knowledge Fields; some may also fulfill one of the Cross-Disciplinary Skills).		
CLS 300	Roman Law and Society	3
CRJ 280	Language for Legal Professions	3
CRJ 455	Criminology	3
ECO 401	Public Economics	3
EDU 250	Foundations of Education	3
ENG 217	Law and Literature	3
HIS 201	United States Military History	3
HIS 347	The History of Marxism	3
IGSR 300	Immersion East Side Seminar	3
IGSR 302	Jesuits in Argentina	3
IGSR 306	Faith/Justice/Globalism in Phi	3
JRN 100	Introduction to Journalism	3
MAT 150	Mathematics and Politics	3
PHI 240	Justice	3
PHI 261	Philosophy of Law	3

PHI 264	Justice & the Environment: The Problem of Climate Change	3
PHI 267	Faith, Reason, and Justice Catholic Social Thought	3
PHI 271	Philosophy of Human Rights	3
PHI 272	Gender and Philosophy	3
PHI 273	Race and Philosophy	3
PHI 274	Social and Political Philosophy	3
PHI 275	Global Feminisms	3
PHI 285	Black Philosophy	3
PHI 286	Latin American Philosophy	3
PSC 111	Western Political Tradition	3
PSC 320	American Constitutional Law I	3
PSC 321	American Constitutional Law II	3
PSY 392	Prosocial Behavior	3
RST 234	Christians (En) Countering Injustice	3
RST 341	Catholic Social Ethics: Theological Perspectives	3
SOC 273	Social Movements and Social Change	3

Ethics

Code	Title	Credits
Students must choose one class that fulfills the Ethics attribute, which currently includes the courses below. (Note that many of these courses also fulfill one of the Breadth of Knowledge Fields; some may also fulfill one of the Cross-Disciplinary Skills).		
CLS 207	Mythology and Literature	3
CLS 214	Greek and Roman Tragedy	3
COM 351	Media Ethics	3
CRJ 382	Criminal Justice Ethics	3
CSC 108	Introduction to Web Computing	3
HIS 348	Twentieth Century Marxism	3
HIS 387	Representations of the Holocaust in Film, Literature, Art and Music	3
HSV 301	Social Policies	3
PHI 241	Ethics: Traditions in Moral Reasoning	3
PHI 242	Ethical Issues in Business	3
PHI 243	Bio-Medical Ethics	3
PHI 244	Environmental Ethics	3
PHI 245	Animal Ethics	3
PHI 246	Ethics of Technology	3
PHI 247	Food and Agricultural Ethics	3
PHI 252	Happiness, Virtue and the Good Life	3
RST 340	Moral Issues Today	3
RST 345	Bio-Moral Problems	3
SPMT 302	Sport and Ethics	3

Diversity

Code	Title	Credits
Students must choose one class that fulfills the Diversity attribute, which currently includes the courses below. (Note that many of these courses also fulfill one of the Breadth of Knowledge Fields; some may also fulfill one of the Cross-Disciplinary Skills).		
ENG 216	Literature and Business	3
ENG 225	The Journey in American Literature	3
ENG 309	Transatlantic Modernism	3
ENG 315	American Literature I	3
ENG 339	Southern Literature	3
ENG 368	Native American Literature	3
ENG 375	US Cold War Culture and Counterculture	3
ENG 382	African American Literature	3
FAH 103	Survey of Pre-Columbian and Native American Art	3
FAM 124	America's Music	3
FAM 213	Women in Music	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3
HIS 124	History of the United States: 1877 to the Present	3
HIS 126	America's Story II: The Later Years	3
HIS 235	From Jamestown to Yorktown: Making the United States	3
HIS 236	From Washington to Lincoln: The Making of American Democracy	3
HIS 251	Sport in America	3
HIS 255	African American History	3
HSV 212	Social and Cultural Diversity	3
PED 354	Adapted Physical Education	3
PHI 292	Philosophy of Beauty	3
RST 304	Women, Gender, and Religion: Judaism, Christianity, Islam	3
RST 312	Race, Ethnicity, and the New Testament	3
SOC 111	Contemporary Social Problems	3
SPA 336	Latin@s in the US: Latino Literature and Film	3
SPE 341	Inclusive Strategies	3

Core Capstone

Code	Title	Credits
Students must take one course designated as a Core Capstone, which currently includes the courses listed below:		
ABEC 404	Wildlife Ecology and Conservation in Africa	3
BIO 477	Plants and Society	3
CLL 400	Humanitas	3
COM 414	Issues in Integrated Marketing Communications	3
DMA 399	Social Documentary	3
DMA 493	Video Institute III	3
DMA 494	Video Institute IV	3
ENG 365	English Core Capstone	3
FAH 481	The Art of the Selfie	3
FAM 390	Sounding Society	3
HIS 414	Black Lives Matter	3
HIS 421	Nature and the Arts of Angling, Restoration, and Contemplation	3
HIS 450	America and the Holocaust	3
HIS 460	The Life and Times of Theodore Roosevelt	3
HIS 470	American Women in History and Literature	3
HIS 487	Representations of the Holocaust in Film, Literature, Art and Music	3
HSV 480	Wellness - Be All That You Can Be	3
KIN 494	Capstone in Kinesiology	3
MAT 345	Climate and Sustainability	3

PHI 398	The City and the Good Life	3
PHI 399	Ethics, Justice, & the Problem of Poverty	3
PSC 442	Seminar in International Relations	3
PSC 452	Politics of Identity in Europe	3
PSY 320	Cultural Psychology	3
PSY 365	Psychology of Aging	3
RST 390	Christian Marriage	3
RST 391	Religious Diversity in Buffalo	3
RST 392	Liberation Theologies	3

Core Pathways

A Core Pathway is a group of courses across Core Fields and/or Attributes and/or Skills that addresses a common theme that is relevant to our mission, but does not duplicate another element of our Core. Core Pathways are meant to illustrate several ways in which a student's Core experience can have a common thread of meaning running through classes in several disciplines.

Students are not required to start a Pathway, nor are they required to complete one; rather, students may choose their Core courses from a Pathway to see a topic of their interest from multiple perspectives.

The lists below indicate Pathways that have been approved by the Core Curriculum Committee and the courses that have been designated within each Core Pathway. To see the what each course counts for in the Core, please click on the course number.

For more information about any of the Pathways below, please contact the Director of the Core Curriculum.

For Faculty: if you are interested in submitting an application for a new Core Pathway to be listed below, please contact the Director of the Core Curriculum.

Canisius Camino (Ancient and Medieval Studies)

Code	Title	Credits
The following courses fulfill core curriculum reqirements and are part of the Canisius Camino Pathway		
CLL 400	Humanitas	3
CLS 103	Greek History	3
CLS 104	Roman History	3
CLS 205	Ancient Greece: Culture and Society	3
CLS 206	Ancient Rome: Culture and Society	3
CLS 207	Mythology and Literature	3
CLS 209	Greek and Roman Archaeology	3
CLS 212	Borders, Walls, and Immigrants in the Ancient World	3
CLS 214	Greek and Roman Tragedy	3
CLS 300	Roman Law and Society	3
CLS 301	Culture and Crisis in Rome: The Final Decades of the Roman Republic	3
CLS 308	Pagans and Christians	3
CLS 309	Greek and Roman Religion	3
ENG 233	The Quest in Medieval Literature	3
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 109	History of Architecture	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 213	Greek and Roman Art	3
FAH 224	Medieval Art	3
FAM 216	Medieval and Renaissance Music	3
HIS 106	The Medieval World	3
HIS 203	Castles, Bones and Battleaxes: Material Culture of the Medieval World	3
PHI 211	Philosophy of Religion	3
PHI 261	Philosophy of Law	3
RST 200	Introduction to the Hebrew Bible	3
RST 201	Introduction to the New Testament	3
RST 219	History of Eastern Orthodox Christianity	3
RST 314	New Testament in Literature and Art	3
RST 324	Biblical Archaeology	3
RST 325	Early Christianity	3

Global Citizenship

Code	Title	Credits
The following courses fulfill core curriculum reqirements and relate to being citizens of the world, and thus are part of the Global Citizenship Pathway		
ABEC 404	Wildlife Ecology and Conservation in Africa	3
ANT 341	Environmental Anthropology	3
ANT 350	Business Anthropology	3
ANT 355	Sociolinguistics	3
CLS 104	Roman History	3
CLS 206	Ancient Rome: Culture and Society	3
CLS 209	Greek and Roman Archaeology	3
CLS 212	Borders, Walls, and Immigrants in the Ancient World	3
CLS 214	Greek and Roman Tragedy	3
CLS 301	Culture and Crisis in Rome: The Final Decades of the Roman Republic	3
CRJ 382	Criminal Justice Ethics	3
ENG 224	The Journey in World Literature	3
ENG 233	The Quest in Medieval Literature	3
ENG 368	Native American Literature	3
ENG 382	African American Literature	3
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 103	Survey of Pre-Columbian and Native American Art	3
FAH 109	History of Architecture	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAM 119	Masterpieces of Music	3
FAS 142	Travel Photography	3
GEO 325	Introduction to Physical Geography	3
HIS 106	The Medieval World	3
HIS 347	The History of Marxism	3
HIS 348	Twentieth Century Marxism	3
HIS 387	Representations of the Holocaust in Film, Literature, Art and Music	3
HIS 450	America and the Holocaust	3
HIS 487	Representations of the Holocaust in Film, Literature, Art and Music	3
HSV 301	Social Policies	3
IGSR 302	Jesuits in Argentina	3
IGSR 306	Faith/Justice/Globalism in Phi	3

PHI 244	Environmental Ethics	3
PHI 264	Justice & the Environment: The Problem of Climate Change	3
PHI 267	Faith, Reason, and Justice Catholic Social Thought	3
PHI 271	Philosophy of Human Rights	3
PHI 273	Race and Philosophy	3
PHI 274	Social and Political Philosophy	3
PHI 286	Latin American Philosophy	3
PSC 111	Western Political Tradition	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
PSC 242	International Organizations	3
PSC 345	Transnational Crime After 9/11	3
PSC 355	European Union	3
PSC 442	Seminar in International Relations	3
PSC 452	Politics of Identity in Europe	3
PSY 320	Cultural Psychology	3
RST 200	Introduction to the Hebrew Bible	3
RST 219	History of Eastern Orthodox Christianity	3
RST 220	Introduction to Eastern Religions	3
RST 224	Islam: Tradition and Revival	3
RST 240	Development of Jewish Religious Thought and Practice	3
RST 327	Modern Global Christianity	3
RST 392	Liberation Theologies	3
SOC 273	Social Movements and Social Change	3
SOC 341	Race and Ethnic Relations	3

Code	Title	Credits
The following courses are designated as Global Awareness, and thus fulfill the Global Awareness Knolwledge attribute in the Core Curriculum and are included in the Global Citizenship Pathway.		
ANT 122	Sociocultural Anthropology	3
ANT 230	Introduction to Archaeology	3
ANT 341	Environmental Anthropology	3
ANT 350	Business Anthropology	3
CHM 104	Energy, Environment, and Society	3
CLS 103	Greek History	3
CLS 104	Roman History	3
CLS 205	Ancient Greece: Culture and Society	3
CLS 206	Ancient Rome: Culture and Society	3
CLS 209	Greek and Roman Archaeology	3
CLS 211	Archaeology of Pompeii	3
CLS 212	Borders, Walls, and Immigrants in the Ancient World	3
CLS 219	Animals in the Ancient World	3
CLS 308	Pagans and Christians	3
CLS 309	Greek and Roman Religion	3
CLS 311	Alexander the Great	3
ECO 460	International Trade	3
ENG 224	The Journey in World Literature	3
ENG 381	Postcolonial Literature	3
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 102	Altarpieces, Academies & the Avant-Garde	3
FAH 107	Introduction to African and Asian Art	3
FAH 109	History of Architecture	3
FAH 110	History of Photography	3
FAH 159	Gender, Identity, and Art	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 224	Medieval Art	3
FAH 245	Renaissance Art	3
FAH 248	Baroque Art	3
FAH 261	Monet and the Age of Impressionism	3
FAH 262	Modern Art	3
FAH 265	Contemporary Art	3
FAH 266	Modern Architecture	3
FAM 119	Masterpieces of Music	3
FAM 123	World Musics	3
FAM 212	Canisius and the BPO Experience	3
FAM 216	Medieval and Renaissance Music	3
FAM 217	Music of the Baroque Period	3
FAM 218	Music of the Classical Period	3
FAM 219	19th Century Music	3
FAM 224	Afro-Centric Music	3
FRC 326	Threads: weaving industry, culture, and commerce through the history of textiles.	3
HIS 106	The Medieval World	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 110	History of Asia Since 1800	3
HIS 131	Latin American History to 1830	3
HIS 132	Latin American History since 1830	3
HIS 211	Women In The Western World	3
HIS 213	Twentieth Century Europe	3
HIS 220	The History of Food	3
HIS 226	History of Ireland	3
HIS 260	Canada and the World	3
HIS 263	Wars of Latin America	3
HIS 280	The Making of Modern Africa	3
MAT 121	Mathematics through History	3
MKT 375	International Marketing	3
PED 203	Lifetime and Fitness Activities	3
PED 204	Games and Sports	3
PHI 211	Philosophy of Religion	3
PHY 131	Earthquakes: Seismology and Society	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
PSC 241	Human Rights and Globalization	3
PSC 242	International Organizations	3
PSC 270	Information Literacy in the 21st Century: Facing Borders	3
PSC 345	Transnational Crime After 9/11	3
PSC 355	European Union	3
RST 200	Introduction to the Hebrew Bible	3
RST 219	History of Eastern Orthodox Christianity	3

RST 220	Introduction to Eastern Religions	3
RST 224	Islam: Tradition and Revival	3
RST 360	Magic, Science and Religion	3
SPMT 440	Global Perspective in Sport	3

Sustainability

Code	Title	Credits
The following courses fulfill core curriculum reqirements and relate to sustainability, and thus are part of the Sustainability Pathway		
ABEC 404	Wildlife Ecology and Conservation in Africa	3
ANT 341	Environmental Anthropology	3
BIO 477	Plants and Society	3
CHM 104	Energy, Environment, and Society	3
EVST 110	Science of Environmental Problems I	3
EVST 111	Science of Environmental Problems II	3
EVST 250	Nature, Culture and Interpretation	3
EVST 259	Environmental History of the United States	3
MAT 345	Climate and Sustainability	3
PHI 244	Environmental Ethics	3
PHI 245	Animal Ethics	3
PHI 264	Justice & the Environment: The Problem of Climate Change	3
SOC 111	Contemporary Social Problems	3
SOC 234	Environment and Society	3
SOC 273	Social Movements and Social Change	3

CORE CURRICULUM LEARNING GOALS AND OBJECTIVES

Courses in the Core Curriculum must meet the following learning goals. Courses may have more learning goals and objectives in addition to those associated with the Core.

Foundations

Foundation ENG 111: Explore Academic Writing

Content

Goal 1: Read college-level texts pertaining to an academic discipline or topic

Objectives: Students will:

- (1A): recognize the audience and purpose of selected texts within an academic discipline or topic
- (1B): articulate the meaning of text passages within an academic discipline or topic

Skills

Goal 2: Construct a coherent, thesis-driven paper on an academic topic

Objectives: Students will:

- (2A): develop the ability to write a clear introduction that frames the academic topic
- (2B): demonstrate appropriate conventions of grammar and style for formal writing
- (2C): articulate a central thesis around which the paper is to be organized
- (2D): organize the paper effectively with coherent paragraphs
- (2E): support the thesis with evidence
- (2F): conclude the paper appropriately for the topic

Goal 3: Develop basic Information Literacy skills

Objectives: Students will:

- (3A): locate and evaluate print and/or electronic sources appropriate for answering a particular research question
- (3B): cite sources according to a conventional documentation style (for example, MLA, APA, Chicago) and with academic integrity

Foundation ENG 112: Writing about Literature

Content

Goal: Students will demonstrate the ability to understand and critically analyze college-level literary texts.

Objectives: Students will:

- (1A) Understand the use of specific literary terms, traditions, or styles
- (1B) Interpret the meanings or significance of a literary text

Skills

Goal: Students will demonstrate the ability to construct a coherent, thesis-driven essay on a literary topic.

Objectives: Students will

- (2A) Identify and articulate a central thesis around which the essay is to be organized
- (2B) Develop a coherent argument that supports a central thesis
- (2C) Support an argument with evidence from literary texts and/or secondary sources
- (2D) Find and evaluate print and electronic sources appropriate for answering a specific research question about a literary text.
- (2E) Cite sources according to MLA documentation style and with academic integrity
- (2F) Demonstrate appropriate conventions of grammar and style

Foundation RST 101: Introduction to Religious Studies

Content

Goal: Students will demonstrate a basic understanding of the nature and role of religion, including the Catholic and Jesuit traditions and other world religions.

Objectives: Students will:

- (1A) Demonstrate basic knowledge of Christianity, Judaism, & another world religion, as determined by the instructor
- (1B) Identify and explain the basic meaning of Catholic beliefs
- (1C) Identify the key religious terms in the Jesuit tradition

Skills

Goal: Students will demonstrate their knowledge of religious studies or theology in comparative and reflective exercises.

Objectives: Students will:

- (2A) Identify & analyze connections between different religious beliefs
- (2B) Find, use, and evaluate information relevant to presenting and defending a thesis
- (2C) Identify and apply the ethical use of academic standards for using sources

Foundation PHI 101: Introduction to Philosophy

Content

Goal: Students will demonstrate knowledge of major figures and major themes within the history of philosophy.

Objectives: Students will:

- (1A) Demonstrate knowledge of at least *one major figure* from three of the four eras in the history of philosophy: Ancient, Medieval, Modern, and Contemporary
- (1B) Demonstrate a basic understanding of some of the major themes in the history of philosophy, from four of the following six areas: Aesthetics, Epistemology, Theories of Ethics, Logic, Metaphysics, and Theories of Justice
- (1C) Demonstrate knowledge of a primary philosophical text from the Catholic tradition or a significant aspect of the Jesuit tradition

Skills

Goal: Students will demonstrate the ability to construct and analyze philosophical arguments.

Objectives: Students will:

- (2A) Construct and explain cogent philosophical arguments
- (2B) Clarify and analyze claims made in philosophical texts

Breadth of Knowledge Fields

Field 1 (Religious Studies and Theology)

Content

Goal: Students will demonstrate knowledge in the disciplines fundamentally concerned with religious studies or theology.

Objectives: Students will:

- (1A) Understand the role of religion in the experiences and actions of human life.
- (1B) Understand religious ideas and religious values in their relationship to religious institutions.
- (1C) Understand the diversity of patterns of religious belief in the human experience.

Skills

Goal: Students will demonstrate the skills that will enable them to become critical thinkers on questions of religious substance.

Objectives: Students will:

- (2A) Demonstrate competence in the use and analysis of primary sources.
- (2B) Demonstrate the ability to understand and explain religious concepts.
- (2C) Demonstrate the ability to relate course subject matter to the human experience.

Field 2 (Philosophy)

Content

Goal: Students will demonstrate a deepened knowledge of a principle theme and a major era or core figure in the history of philosophy.

Objectives: Students will:

- (1A) Demonstrate knowledge of a major topic or branch in the history of philosophy such as Aesthetics, Epistemology, Ethics, Logic, Metaphysics, and Theories of Justice.
- (1B) Demonstrate knowledge of a major era in the history of philosophy (Ancient, Modern, Medieval, or Contemporary) or a core figure in the history of philosophy.

Skills

Goal: Students will demonstrate the ability to communicate and assess philosophical ideas and arguments.

Objectives: Students will:

- (2A) Use philosophical terms and language appropriately in their prose.
- (2B) Identify and analyze assumptions and premises in philosophical arguments.
- (2C) Construct philosophical arguments and write cogently about philosophy.
- (2D) Demonstrate the ability to relate abstract theory to concrete practice.

Field 3 (Literature and the Arts)

Content

Goal: Students will demonstrate an understanding of the aesthetic dimension of human life through the study of literature, art, or music and the ways in which they mirror and shape the human experience.

Objectives: Students will:

- (1A) Identify specific techniques, styles, or formalistic properties of particular examples of literature, art, or music.
- (1B) Identify the relationship of particular examples of literature, art, or music to the traditions from which they have emerged.
- (1C) Demonstrate an understanding of how creative work in literature, art, or music mirrors and shapes human experience.

Skills

Goal: Students will demonstrate knowledge of the methods of literary and artistic criticism and interpretation.

Objectives: Students will:

- (2A) Critically evaluate the methods of literary and/or artistic criticism and interpretation employed in the study of literature, art, or music.
- (2B) Employ the methods of literary and/or artistic criticism and interpretation in the study of literature, art, or music.

Field 4 (History)

Goal: Students will demonstrate familiarity with the way in which historians analyze change and continuity over time with reference to specific historical events, themes, ideas, and/or individuals.

Objectives: Students will:

- (1A) Situate events, people, and/or artifacts in their appropriate historical context.
- (1B) Recognize the relationship between cause and effect in the process of historical change.
- (1C) Read and interpret evidence from primary sources and texts.
- (1D) Read and understand scholarly historical arguments and the way in which they are constructed.

Field 5 (Social Sciences)

Content

Goal: Students will demonstrate knowledge of human behavior from the perspective of a social science discipline.

Objectives: Students will:

- (1A) Demonstrate knowledge of the basic concepts and theories of a social science discipline.
- (1B) Demonstrate knowledge of research methodologies used in a social science discipline.

Skills

Goal: Students will utilize a social science discipline to critically evaluate social, cultural, and/or political claims.

Objectives: Students will:

- (2A) Apply social science concepts and theories to concrete problems of human society.
- (2B) Apply qualitative or quantitative analysis to situations in the world.

Field 6 (Natural Sciences)

Content

Goal: Students will demonstrate through explanations, interpretations, and critical analyses their understanding of natural phenomena.

Objectives: Students will:

- (1A) Demonstrate valid application of cause and effect reasoning.
- (1B) Describe patterns of scale, proportion, and quantity in the natural world.
- (1C) Define natural systems in terms of energy, material components, and processes of change.

Skills

Goal: Students will demonstrate the ability to reason and communicate so that their actions can have positive impacts on society.

Objectives: Students will:

- (2A) Communicate scientific information effectively.
- (2B) Use qualitative or quantitative data to make rational predictions of natural phenomena.
- (2C) Apply scientific knowledge to issues impacting society.

Field 7 (Mathematical Sciences)

Content

Goal: Students will be conversant with the essential terminology and concepts of a mathematical, statistical, or algorithmic system.

Objectives: Students will:

- (1A) Demonstrate knowledge of the vocabulary and notation of a mathematical, statistical, or algorithmic system.
- (1B) Demonstrate understanding of the theory behind the concepts and techniques of a mathematical, statistical, or algorithmic system.

Skills

Goal: Students will have the appropriate skills and techniques used in problem analysis and solution.

Objectives: Students will:

- (2A) Analyze and apply appropriate quantitative, theoretical, and/or computational techniques to solve problems.
- (2B) Interpret the results of their analysis clearly.

Attributes and Skills

Advanced Writing-Intensive

Content

Goal: Students will demonstrate the ability to write an effectively developed logical argument.

Objectives: Students will:

- (1A) Integrate appropriate ideas and evidence, in accordance with course content.
- (1B) Organize those ideas and that evidence strategically for a given audience and purpose.

Skills

Goal: Students will demonstrate an understanding of appropriate or discipline-specific writing styles, standards, and conventions through a process that includes revision.

Objectives: Students will:

- (2A) Write grammatically correct sentences that are fluid and include smooth transitions.
- (2B) Use vocabulary that is appropriate for the purpose and audience/field.
- (2C) Employ correct punctuation, spelling, capitalization, and documentation conventions.
- (2D) Use appropriate citation and attribution of ideas, information, and evidence.

Oral Communication

Content

Goal: Students will compose a message and provide ideas and information appropriate to its topic, audience, setting, and purpose.

Objectives: Students will:

- (1A) Identify the components of effective oral communication of an idea with an argument or thesis supported by evidence.
- (1B) Demonstrate the knowledge of how to select appropriate material that will be understood by the audience.
- (1C) Apply organizational and explanatory strategies suitable to the topic, audience, setting, and purpose of the message that is being delivered.

Skills

Goal: Students will demonstrate the ability to deliver effective oral presentations.

Objectives: Students will:

- (2A) Speak clearly and employ a rich and imaginative vocabulary with diction and pronunciation appropriate to the context.
- (2B) Present fluently, maintain eye contact with the audience, and use gestures appropriate to the context.
- (2C) Define the thesis and/or purpose of the message, use smooth transitions from one section to the next, and end with a clear and direct conclusion.
- (2D) Demonstrate the effective and judicious use of detail and evidence in substantiating and/or illuminating the presentation's central thesis.

Diversity

Goal: Student will demonstrate an understanding of the diverse and multicultural character of the United States, including variables such as social class, race, gender, ethnicity, religion, or sexuality.

Objectives: Students will:

- (1A) Identify the impact of multiple variables on the American experience.
- (1B) Articulate the interplay of at least two of these variables on the American experience.
- (1C) Distinguish how the power structure in America affects diverse groups.

Ethics

Content

Goal: Students will demonstrate an understanding of ethical criteria and the principles necessary for moral evaluation and their practical application.

Objectives: Students will:

- (1A) Identify and articulate the fundamental elements of at least two major ethical theories.
- (1B) Recognize the connection between ethical theory and behavior.
- (1C) Identify and understand the core assumptions that lie at the heart of ethical behavior.

Skills

Goal: Students will demonstrate the ability to employ ethical reasoning in matters of human concern.

Objectives: Students will:

- (2A) Critically evaluate how conceptions of moral obligation contribute to living a worthwhile life.
- (2B) Apply ethical theories in analyzing ethical dilemmas and questions.
- (2C) Defend an ethical position while displaying an awareness of opposing ethical arguments.

Global Awareness

Content

Goal: Students will demonstrate knowledge of the history, culture, and/or political systems of societies, states, and peoples other than the United States.

Objectives: Students will:

- (1A) Identify and describe the history, social structures, political institutions, and/or patterns of cultural expression that characterize specific societies, states, and peoples outside the United States.
- (1B) Identify the various factors that have contributed to the history and development of social structures, political institutions, and patterns of cultural expression that characterize specific societies, states, peoples, and cultures outside the United States.

Skills

Goal: Students will demonstrate how their knowledge of geographical regions other than the United States fosters greater awareness of the world in which the students live.

Objectives: Students will:

- (2A) Critically analyze how the history, culture, and/or political systems of geographical regions other than the United States inform the way people outside the United States view themselves.
- (2B) Critically analyze and reflect on how their knowledge of the history, culture, and/or political systems of geographical regions other than the United States inform the way in which the students understand their relationship to the world.

Justice

Content

Goal: Students will demonstrate an understanding of justice, its relationship to power, and the ways in which causes of injustice may be mitigated and justice promoted.

Objectives: Students will:

- (1A) Compare and contrast differing theories of justice, including the ways in which justice has been defined and conceived.
- (1B) Describe the factors that are responsible for injustice with particular emphasis upon the relationship of injustice to inequities in the distribution of power.
- (1C) Describe the ways in which the factors responsible for injustice might be mitigated in the cause of justice.

Skills

Goal: Students will think critically about the factors that create, permit, and/or mitigate the conditions of justice or injustice.

Objectives: Students will:

- (2A) Identify how the distribution of power is embedded in institutions, social structures, and/or codes of conduct.
- (2B) Critically analyze theories, policies, and practices in so far as they promote either justice or injustice.
- (2C) Demonstrate how the conditions of injustice might be mitigated by specific forms of action.

Core Capstone

Core Capstone

Goal: Students will demonstrate understanding of the four core knowledge attributes and integrate them with course themes and content in light of the Jesuit principle of seeking to live a socially responsible life, which underlies the Canisius College mission.

Objectives: Students will:

- (1A) Integrate one or more theories of ethics with the theme of this course and apply theory to course content.
- (1B) Integrate one or more theories of justice with the theme of this course and apply theory to course content.

- (1C) Demonstrate how global awareness informs strategies for responsible citizenship as that awareness applies to the theme and content of this course.
- (1D) Demonstrate how knowledge of diversity informs strategies for responsible citizenship as that knowledge applies to the theme and content of this course.

All-College Honors Program

Director: Bruce J. Dierenfield, PhD

Introduction

The All-College Honors Program is a learning community of excellent and motivated students who take interdisciplinary courses and enjoy abundant opportunities for social interaction and cultural enrichment. Because the Honors Program replaces the entire core curriculum, Honors students need not take any regular core courses or fulfill any core requirements. All majors can complete Honors, and even triple majors have done so. Please see the Honors website for a more detailed description of the Honors Program and its faculty, facilities, and academic, co-curricular, and cultural opportunities at the All-College Honors' website (https://www.canisius.edu/academics/office-academic-affairs/all-college-honors-program/).

Qualifications

Admission to the All-College Honors Program is open to entering first-year students with strong academic records and to well-qualified transfer students who seek permission from the Honors director.

Advisement

All-College Honors students should see the Honors director regarding advisement questions.

Program Experiences

Many Honors courses are supported with a variety of co-curricular activities. Examples include visiting museums, art galleries, and houses of worship; attending cultural performances; sight-seeing places of historic significance; and dining at faculty homes or area coffeehouses.

The Honors Program and the Honors Student Association sponsor many different events, including a freshman orientation book discussion and cookout, an off-campus retreat, a luncheon series with community leaders, a book club, a film series, snow tubing and skating, lectures by nationally-known professors, jazz and orchestral concerts, visits to museums and sports arenas, ice cream socials, a 60-second talks program, a Thanksgiving dinner, a Christmas party, an Easter egg hunt, an annual banquet, and trips to major cities. The digital *Honors Post-Journal* publicizes and promotes these events.

In addition, many Honors students participate in community service projects, including a soup kitchen and an after-school program to feed and tutor disadvantaged children.

Curriculum

All-College Honors Program Curriculum

(12 Honors courses, all of which count for 3 credits; there are no prerequisites).

Code	Title	Credits
HON 101	Honors English	3
HON 110	Western Tradition I	3
HON 111	Western Tradition II	3
1 Fine Arts Honors Course		3
1 History Honors Course		3
1 Literature Honors Course		3
1 Philosophy Honors Course		3
2 Religious Studies Honors Courses		6
1 Science/Math/Technology Honors Course		3
1 Social Science Honors Course		3
HON 451	Thesis	3
Total Credits		36

One of these Honors courses must focus on the American experience, and another must address diversity or global understanding.

Typically, Honors freshmen complete Honors English (HON 101) and Western Tradition (HON 110 and HON 111) in their first year. First-year Biology majors have room for only one of these courses in their first semester (usually HON 101) and another of them in the second semester (usually HON 111). If their schedule permits, Honors students may take additional Honors coursework, though only juniors and seniors may take Honors thesis (HON 451). Except for Honors thesis, the course number does not indicate the level of difficulty.

Most Honors students must also complete two non-Honors courses in another language (ancient, modern, or sign), unless they receive AP credit or have satisfactorily completed college-level foreign language coursework. International students whose native language is not English are exempt from this requirement.

Additional Course Considerations

Honors students may receive Honors credit for some qualifying Advanced Placement or International Baccalaureate scores, though there are no exemptions for Honors English or Western Tradition. It may also be possible for college credit obtained elsewhere to be accepted in the Honors Program. The decision as to what outside credit the Honors Program can accept rests with the Honors director. Honors students are encouraged to study abroad and receive up to six hours of Honors credit for doing so.

Note: To graduate with All-College Honors distinction, students must receive credit for all twelve Honors courses taken and two courses in the same foreign language, and have an overall GPA of 3.25 in all Canisius courses.

Roadmap

Recommended Semester Schedule for Honors Program Course Requirements

Freshman	
Fall	**Spring**
HON 101	HON 111
HON 110[1]	
Sophomore	
Fall	**Spring**
1-2 Honors courses[2]	1-2 Honors courses

Junior	
Fall	**Spring**
1-2 Honors courses	1-2 Honors courses
Senior	
Fall	**Spring**
HON 451	1-2 Honors courses
Thesis may also be taken in the junior year or in second semester of the senior year.	

1 Biology majors take this class in the fall of the sophomore year

2 Biology majors generally take 2 courses in the fall of the sophomore year, including HON 110

Learning Goals & Objectives

Student Learning Goal 1

Honors students will demonstrate academic maturity.

Students will:

- Objective A: Take the lead in researching and writing the thesis;
- Objective B: Incorporate suggestions made by the thesis adviser;
- Objective C: Meet thesis deadlines.

Student Learning Goal 2

Honors students will exhibit strong critical thinking skills.

Students will:

- Objective A: Identify salient arguments in the literature;
- Objective B: Gather, select, and organize credible evidence in crafting the thesis;
- Objective C: Draw warranted conclusions from the evidence presented;
- Objective D: Generate new ideas based on their research.

Student Learning Goal 3

Honors students will follow appropriate writing conventions.

Students will:

- Objective A: Write the thesis in a clear and concise style;
- Objective B: Avoid most mechanical mistakes in writing the thesis;
- Objective C: Use an appropriate form of documentation in presenting the thesis.

Student Learning Goal 4

Honors students will operate in an intellectually honest fashion.

Students will:

Objective A: Formally acknowledge all borrowed information and ideas in the thesis.

HON 101 Honors English **3 Credits**

Various literary genres. Works by writers representing a wide variety of places, times, nationalities, and philosophies. Student's writing refined through these readings and composition assignments.

Restriction: restricted to honors students or by permission of the honors director.

Offered: fall.

HON 105 Disease, Health, and Medicine in America **3 Credits**

This interdisciplinary course traces the history of disease, health, and medicine from Columbus' deadly times to the current threats of a Zika epidemic, lead poisoning from contaminated water, and Buffalo's heroin crisis. Students will learn about modern medical miracles and horrifying medical experiments, visit the Museum of disABILITY History, conduct research on an area of personal interest, and hear from an addiction expert. The theory behind this course is the way that we define and treat disease reflects contemporary historical events and our social and cultural values, as well as existing science, education, economics, and technology. Fulfills either the History, Science/Math/Tech, or Social Science requirement in Honors. It also fulfills the American Experience requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: summer.

HON 108 The Rise, Fall, & Rebirth of Buffalo **3 Credits**

This interdisciplinary course focuses on the rich history, architecture, and culture of Buffalo, New York, known as the Queen City of the Lakes and the City of No Illusions. Through a Place as Text approach, we will visit architectural gems by Sullivan, Richardson, Wright, and Green; Millionaires' Row on Delaware Ave.; organized crime sites; the Colored Musicians' Club; and Buffalo's revived waterfront. Fulfills either the History or Social Science requirement in Honors, as well as the American Experience requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: summer.

HON 110 Western Tradition I **3 Credits**

Introduces students to significant intellectual and material elements of Western Civilization from the Ancient World through the Middle Ages. Through an interdisciplinary approach, this course investigates the presumptions, motivations, and expectations of westerners in order to ascertain what is peculiarly 'western' about the world in which we live and think.

Restriction: restricted to honors students or by permission of the honors director.

Offered: fall.

HON 111 Western Tradition II **3 Credits**

Introduces students to significant intellectual and material elements of Western Civilization since the Renaissance. Through an interdisciplinary approach, this course investigates the presumptions, motivations, and expectations of westerners in order to ascertain what is peculiarly 'western' about the world in which we live and think. HON 110 is not a prerequisite.

Restriction: restricted to honors students or by permission of the honors director.

Offered: spring only.

HON 211 Living Well **3 Credits**

A critical examination of the idea of living well under the principles of different ethical notions. Emphasis on the ideas of virtue and vice both for living well and for ethical theories. Character sketches for each different position will be a basis for critical and comparative inquiries. This course fulfills the Philosophy and Diversity/Global Understanding requirements of the Honors Program.

Prerequisite: None. **Corequisite:** None.

Offered: occasionally.

HON 212 Beauty Matters: Philosophical Considerations of Beauty from Ancient Times to the Present Day **3 Credits**
An examination of the nature and importance of beauty as an aesthetic principle and as a source of value for our lives. The course covers issues of beauty and the sublime in ancient and early modern times, but focuses on philosophical literature on beauty from the last few decades, often focusing on issues related to gender and race. Fulfills the Philosophy requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 213 Debating Dinner: The Philosophy of Eating **3 Credits**
This course will explore the complex relationships involved in the food that we eat every day. We will examine a variety of issues that circle around food, including consumer ethics, a troubling food system, global hunger, obesity and public health, plant and animal industrial agriculture, and food workers.
Restrictions: Honors Program.
Offered: occasionally.

HON 214 Sights & Sounds: Philosophy, Music, Film **3 Credits**
An introduction to the philosophy of music and to the philosophy of film. Students need have no special knowledge of music or film, but should have an interest in listening to music and watching film. The first half of the course will explore philosophical readings that focus on different aesthetic characterizations of music and various debates that have followed philosophical theories in formalism and expression accounts. While the debates often originated in eras before the popular music of the 20th century, students are encouraged to apply these views to the wide range of their personal listening habits and to share them with the group. The second half will explore philosophical readings on film and delve into common debates in which philosophers have engaged regarding contemporary film, including questions about its nature, whether films have authors, how film engages our emotions, and what relationship film has to ethics, criticism, and knowledge. Fulfills either the Philosophy or Fine Arts requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 215 Death and Dying **3 Credits**
This course offers an opportunity for reflective examination on death and dying. We all are going to die, but many of us prefer not to think about it. This course tries to rectify that circumstance by considering the following questions: what is death? What does it mean to die well or to obtain a good death? Is death bad for the person who dies? Is it possible and/or desirable to defeat death? Is an immortal life a good human life? How should human beings view death? How can we best honor and remember the dead? What makes killing “wrong” in cases such as abortion, euthanasia, or suicide? This course will lean heavily on philosophy, but will be fundamentally interdisciplinary, drawing on sociology, psychology, theology, and the natural sciences.

HON 216 Honors Philosophy **3 Credits**
Selected topics in philosophical inquiry, such as rationalism, empiricism, epistemology or metaphysics. Fulfills the Philosophy requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 217 Cities, Suburbs, and Spaces **3 Credits**
This course examines the 'built' environment of human beings, such as parks, bedrooms, churches, sidewalks, streets, and transportation systems, in order to determine what kinds of cities, suburbs, and spaces can best contribute to human flourishing. Fulfills the Philosophy or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 218 Intellectual History of the West **3 Credits**
This course takes a historical approach to introduce the main ideas of the principal philosophers and thinkers of Western civilization from the beginnings in ancient Greece to the 20th century. Fulfills either the History or Philosophy requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 219 Revolutions of the West **3 Credits**
This new interdisciplinary course treats the political philosophy and patterns of the four main revolutions in the West, namely, the French Revolution (1789-1799) and its legacy, the Mexican Revolution (1910-1920), the Russian Revolution (1917), and the Cuban Revolution (1953-1959). We will also examine the views of seminal thinkers whose writings inspired these revolutions, including John Locke, Jean Jacques Rousseau, Karl Marx, and Vladimir Lenin. The nature of revolutions and the profound social and cultural changes wrought by these pivotal upheavals will also be considered. Fulfills either the History, Philosophy, or Social Science requirement in Honors, as well as the Diversity/Global Awareness attribute.Offered: Occasional.

HON 220 From Asylums to Acceptance: The "Disabled" in America **3 Credits**
This new Honors class is an interdisciplinary introduction to the history, laws and institutions; science, health, and technology; culture and attitudes of and toward those deemed "disabled." We will look at the medical impairments defined as "disabilities" or "handicaps" over time, considering changing definitions and the discovery of new "mental illnesses" and treatments, in particular. This course is also organized around the concept of disability as a social construct which identifies the systemic barriers, negative attitudes, and exclusions by society as major contributing factors to the disabling of people. Students can expect an overview of major themes, events, individuals, policy and scientific developments, as well as political and social activism of, by, and for people with disabilities. Students will be challenged to revise and expand their views of diversity, justice, ethics, civil rights, and even their vocabulary to include the "differentlyabled"- ideally becoming models or agents for change. Specific topics will range from "lunatic asylums," neurasthenic women, eugenics, and lobotomies to the ADA, St. Mary's School for the Deaf, disability reformers, and computerized prosthetics. Learning will come from a variety of sources and methods built around seminar style discussion of primary and secondary documents and oral research presentations plus lectures, film/videos, a service animal trainer presentation, and a tour of Buffalo's Museum of DisAbility History.
Restrictions: Honors students only, or by permission of the program director.
Offered: every other fall.

HON 222 History & Literature of the American Civil War **3 Credits**
This course will study the various historical reasons for the Civil War, including the social, cultural, and political contexts of 19th-century America, and the literature it produced. We will compare celebrated works, such as Uncle Tom's Cabin, with lesser-known authors, and question if the 'real war' is indeed in these books. Fulfills either the History or Literature requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 223 Religion, Politics, & the Presidency **3 Credits**
This course will begin with the Puritan notion of American exceptionalism, and then turn to the religious thinking of the Founding Fathers who drafted the First Amendment. Among other topics, the course will look at several presidential elections, the adoption of religious mottos, the rise of conservative religious groups that promoted political action, and the debate over hot-button issues, such as immigration, school prayer, abortion, and same-sex marriage. Anticipated class activities include an election night party. Fulfills either the History, Religious Studies, or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 224 Disease, Health, and Medicine in America **3 Credits**
Treats life and death issues--literally--from the deadly smallpox brought by Columbus to the bio-terrorism of today. The theory of this course is that the way Americans define and treat disease reflects contemporary historical events and our social and cultural values, as well as the existing science, education and technology. Fulfills either the History, Science/Math/Tech, or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: once a year.

HON 225 Public Health & Mental Health **3 Credits**
The purpose of this course is to provide a general introduction to changing definitions of what public health is, its societal and population significance; and its functions in combination with science and politics. Students will learn of the connectivity of public health and health care in the U.S. and globally, as well as the social, behavioral, environmental, and biological factors that contribute to specific individual and community health, both in the U.S. and elsewhere. The course will also address mental health, which includes our emotional, psychological, and social well-being and which affects how we think, feel, and act. It also helps to determine how we handle stress, relate to others, and make choices. We will examine why mental illness has long been stigmatized and consider common mental health issues, including those young adults often experience.
Offered: occasionally.

HON 226 African-American Lives & Culture **3 Credits**
This interdisciplinary course will focus on the lives of representative African Americans; consider several aspects of African-American culture, including history, literature, religion and music; and provide co-curricular opportunities. The course will conclude with a consideration of the claim that America has become a post-racial society. Fulfills either the History, Religious Studies, Literature, or Social Science requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 227 Vices and Addictions in American Society **3 Credits**
Explains and analyzes the impact of vices and addictions on American daily life and leisure, disease and treatment, the economy, government policies, and reform crusades. Some of the bad habits and addictions to be considered include tobacco, alcohol, marijuana and cocaine, prescribed drugs, coffee, chocolate, and sports betting. Fulfills either the History, Science/Math/Tech, or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: once a year.

HON 228 All-College Honors Program **3 Credits**
This course will begin with the 1948 United Nations declaration on genocide and, based on that document, will examine the many ways in which genocide was inflicted upon the indigenous peoples of the Americas, especially the Indians of North America. It will examine the nature and scope of the atrocities that were employed to carry out that genocide. It will also explore how race, religion, and sex contribute to genocide. Finally, it will examine the continuation of genocidal policies by the U.S. government and the long-lasting effects of those policies across generations to the present. Fulfills the History requirement in Honors, as well as the American Experience or Diversity/Global Awareness attribute.
Offered: Occasionally.

HON 231 War & Peace since 9/11 **3 Credits**
In exploring the nature of world politics and American foreign policy since 9/11, this course focuses on what the United States must do to maintain its traditional reserves of 'hard' and 'soft' power in an age of globalization and terrorism. Fulfills the Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 232 American Government: The User Guide **3 Credits**
Politics matters. It will significantly impact everyone, regardless of career path. This course will provide the basic tools that students will need to comprehend and effectively participate in American government. Topics will include the three branches of government, American federalism, elections, civil rights, civil liberties, taxes, and budgets. Fulfills the Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 236 Identity and Power **3 Credits**
This course is designed to provide students with a theoretical foundation in examining everyday experiences of people by putting social forms of identity (gender, sexual, racial, ethnic, class, nation, etc.) and power at the center of the discussion. The aim of the course is to encourage students to develop the analytical skills needed to think critically about the relationship between social identity and power. After introducing students to the key concepts and critical theories of 'power' and 'ideology', the historical processes of colonialism, imperialism and (and ideology) of capitalism will be discussed to establish the background for further class discussions. The seminars will then encourage students to engage in critical dialogues about racial, ethnic, religious, class, nation, gender, and sexual identities and how these identities influence the social positioning of individuals/groups and produce issues of social stratification, conflict, and inequality. The students will examine the ways in which these aspects of identity are socially reproduced, transformed and re-interpreted, both historically and contemporarily. Fulfills Social Science requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 238 The American Presidency **3 Credits**
Fulfills the Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 241 History of Judaism **3 Credits**
An introduction to the history, religion, and literature of Judaism from the ancient world to the present. Fulfills either the Religious Studies or History requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 242 Cultural Constructions of Jesus **3 Credits**
We will examine the various presentations of Jesus that have occurred in different historical and cultural contexts, beginning with the canonical Gospels. The course concludes with a survey of modern interpretations of Jesus: the American Jesus; the Jesus of Latin America, Asia, and Africa; and Jesus in modern literature and film. Fulfills the Religious Studies requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 245 Homeric Epic **3 Credits**
This course seeks to examine a series of questions prompted by Homer's Iliad and Odyssey and look at the broader consequences of those responses from antiquity to the present. It will also introduce the history and language of ancient Greece. No prior knowledge of Greek is required. Fulfills either the History or Literature requirement in Honors, as well as the Diversity/Global Awareness requirement. In addition, this course counts as one of the two required courses in foreign language.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 246 American Religions **3 Credits**
This course considers the history of American religions from pre-contact times to the present, It focuses on the evolution of religious faiths and religious ideologies as varying groups came into contact with one another, splintered off into new faith communities, and founded completely original systems of religious belief. Fulfills either the History or Religious Studies requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 247 Islam: Religion, History, and Culture **3 Credits**
A study of Islamic scriptures, Muslim cultures, social institutions, religious practices, and Muslim and Western writings to better understand Islam and Muslims in the U.S. and throughout the world. Fulfills either the Religious Studies, History, or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 248 Religions of the East **3 Credits**
In this class, we will survey some of the major religious traditions of East and South Asia, including Hinduism, Buddhism, Confucianism, and Daoism. Particular attention is placed on historical and contemporary beliefs, practices, texts, and cultures, as well as their changes over time. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 249 Magic, Science, and Religion **3 Credits**
This course will consider diverse ways in which world cultures conceive, make use of, and tap into the realms of the extra- human. We will focus not only on 'exotic' societies and peoples, but also explore the meanings of magic, science and religion in more familiar contemporary North America. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 250 Caesar & Christ **3 Credits**
This course studies the early days of biography as a genre of Green & Latin literature and its association with imperial and religious power. The course seeks to examine the characteristics of classical lives and Christian hagiography and to consider their influence on modern biography. Since biography generally places the character sketch within a chronological narrative, the course will examine the history of the Roman Empire, early Christendom, and the earliest days of the Holy Roman Empire, with particular focus on the developing struggle between secular and religious authority. The course will also introduce students to the Latin language. Fulfills either the History or Literature requirement in Honors, as well as the Diversity/Global Awareness requirement. In addition, this course counts as one of the two required courses in a foreign language.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 252 Plantations, Ghettos, Prisons: The Black Experience in America **3 Credits**

To a large degree, the black experience in America has been one of confinement. This new interdisciplinary Honors course will look at why and how African Americans were confined physically, as well as some of the many effects resulting from such enforced confinement. We will consider "enslavement" in three successive incarnations, beginning in the 18th century and lasting until today, i.e., southern plantations, northern ghettoes, and mass incarceration. We will also look at ways in which African Americans resisted such confinement—turning to religion, making music, composing literature, and organizing protest—and the consequences of resisting the limited world that whites had constructed for them. Among other topics, we will look at the brutality of the slave system, the formation & maintenance of the ghetto, the "long" civil rights movement, black nationalism, the Black Panthers, the Black Arts Movement, police shootings, and the Black Lives Matter movement.
Restrictions: All-College Honors Program students only, or by permissoin of the program director.
Offered: every third year.

HON 255 The Buffalo Experience **3 Credits**

This interdisciplinary course will focus on the history, architecture, and culture of Buffalo, New York, known variously as the 'Queen City of the Lakes' and the 'City of No Illusions.' There will be walking tours and cultural experiences to supplement classwork. Fulfills either the History, Social Science, or Religious Studies requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 270 Psychobiography **3 Credits**

This course will provide a forum to understand the life of an individual, a literary figure, or a historical period through the use of psychological science. At the same time, it facilitates the critical evaluation of psychological theory by examining where theory and research work in real-world contexts. Fulfills Social Science or Science/Math/Tech requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 311 Genocide & Human Rights in the 20th Century **3 Credits**

The Twentieth Century was a century of genocide. Starting with the massacre of the Hereros and Namaquas in German Southwest Africa and ending with the genocidal warfare between the Tutsi and Hutus in Rwanda, more than a hundred million people died as victims of genocide. This course explores the history of these genocides from two different perspectives. On the one hand, it seeks to explain why the Twentieth Century has experienced such an explosion of genocide and what the factors involved in this have been. How is genocide best defined? What was the role of history, geography, technology, and religion in the genocidal violence of the Twentieth Century? On the other hand, this course examines the history of natural theory through the adoption of human rights as the foundation of the new international order that emerged in the wake of World War II.
Offered: occasionally.

HON 313 The Holocaust in Literature & Film **3 Credits**

The purpose of this course is to explore how artists have risen to the challenge posed by Adorno's dictum in literature and film since the end of World War II. It will examine the efforts—both by those who experienced the Holocaust first-hand and those who experienced it from afar—to describe the indescribable, to give aesthetic form and content to an event that negates the very possibility of beauty and meaning, to discover in the wanton destruction of human life a meaning and lesson for all mankind. The course will begin with first-person testimony, that is, the memoirs and reflections of those who survived the Holocaust and their efforts to make sense of their own pain and suffering. The course will next examine literary and poetic representations of the Holocaust, in part by survivors and in part by writers who viewed the Holocaust from a distance. At the end of the course, students should be able to demonstrate a greater ability to use cultural artifacts in well-developed analytic essays on significant historical questions related to representation of the Holocaust. They should also be able to demonstrate a greater sensitivity to the human suffering caused by religious and racial antisemitism, a keener sense of the moral dimensions of varied responses to the Holocaust, and a greater sensitivity to the plight of persecuted minorities more generally.
Restrictions: All-College Honors Program students only, or by permission of the program director.
Offered: occasionally.

HON 316 Famous Jesuits **3 Credits**

Students will study the lives and works of famous Jesuits, starting with Ignatius Loyola, who founded the religious order that bears his name (Society of Jesus). The course will also look at Matteo Ricci's efforts to adapt Christianity to Chinese culture and several contemporary Jesuits, including Francis I, the first Jesuit pope. Fulfills the Religious Studies requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 321 Critical Issues in the History of Photography **3 Credits**

This seminar proposes to examine the long-standing critical issues surrounding the many discursive spaces (e.g., the museum, family scrapbook, illustrated press, and court of law) that photography occupies in our common (that is, shared) culture. Fulfills the Fine Arts requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 322 Orchestral Music **3 Credits**

The course covers orchestral music from the 18th through the 20th centuries. Students will develop an understanding of the history of orchestral music as well as how it is structured, its general characteristics, and its social context.
Offered: Fall.

HON 323 Opera **3 Credits**

Introduces students to opera. Students will develop an understanding of the aesthetics of opera by studying its elements, aspects of the operatic voice, the genre's history and examples of the art form in live and recorded performance. No previous musical knowledge or experience is required. Fulfills the Fine Arts requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: spring.

HON 324 The Symphony **3 Credits**
Introduces students to the symphony. Students will develop an understanding of the symphonic form from the classical period to the present through a study of major composers and their works. No previous musical knowledge or experience is required. Fulfills the Fine Arts requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: fall.

HON 325 Art, Advertising, & Utopia **3 Credits**
This interdisciplinary seminar explores the social function of art. It emphasizes contemporary art practices, the effect of technology on art, and first-hand art 'experiences' by visiting artist studios and galleries. Using art as a vehicle for social change, students will develop aesthetic critiques pertinent to this age of images. Fulfills either the Fine Arts or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 326 Art Song **3 Credits**
The simplest musical expression in Western culture is the solo song, the blending of lyric poetry and music. The course surveys art song from the Middle Ages through the twentieth century, looking particularly at those periods and styles that stand as high points of musical achievement. Students will study the poetry and musical styles of a selected repertoire with emphasis on its historical and cultural context and reception. Students will experience the music through live performances on or outside of campus as well as through recordings in class. No previous musical knowledge is required to take the course. Fulfills the Fine Arts requirement in Honors. It also fulfills the Diversity/Global Awareness attribute.
Prerequisite: none. **Corequisite:** none.
Offered: occasionally.

HON 345 Explorations in the Development of Mathematics **3 Credits**
Explores famous problems in mathematics to consider the role of culture in changing motivation, concept, and technique of influential mathematicians. Fulfills the Science/Math/Tech requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 346 30 Years that Shook Science: The Story of the Quantum **3 Credits**
Major scientific breakthroughs during the 19th century led many scientists at the end of the 1800's to confidently claim that science was close to explaining everything theoretically. But how wrong these scientists were! The solutions to a few remaining problems led to the discovery of the quantum, which started a revolution in science at the beginning of the 20th century. This course will explore a number of important concepts in science discovered in the early 1900's, their historical development, and the intriguing lives of the scientific giants who played a major role in this revolution. Fulfills either the History or the Science/Math/Tech requirement in Honors.
Prerequisite: None. **Corequisite:** None.
Offered: occasionally.

HON 347 Mathematics: Patterns, Problems, & Puzzles **3 Credits**
Mathematical problems and puzzles can often be solved by investigating underlying patterns. This course analyzes such patterns in the mathematical fields of number theory, geometry (2D & 3D), and logic. The history of the mathematics (and the mathematicians) involved with these patterns, problems and puzzles will also be explored. Fulfills the Science/Math/Tech requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 350 The Theory of Almost Everything **3 Credits**
Will develop an understanding of the state of modern, fundamental physics so that students gain a conceptual idea about the unification of all physical laws, including gravity, electromagnetism, and nuclear forces. The course is set at a level of the general public, with the bulk of the readings being science popularization. Fulfills the Science/Math/Tech requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 351 Biology in Fiction and Film **3 Credits**
This course will focus on biological concepts and themes as conveyed in novels, short stories, film, and television. Material and class discussions will feature both the science and cultural implications behind topics including evolution, ecology, human consciousness, genetics, disease, and gender/sexuality. Fulfills either the Fine Arts, Literature, or Science/Math/Tech requirement in Honors.
Offered: occasionally.

HON 352 Water and Society **3 Credits**
From the ongoing drought in California to the toxic algae blooms in Lake Erie, the importance of clean freshwater is gripping the headlines. In this class, we will explore the science, history, and politics of water resources in the U.S. We will also explore the science behind the hydrology and environmental quality of freshwater systems, delve into the history and politics of Western water law, understand how past water distributions have complicated efforts to deal with the current drought, look at ongoing controversies involving water use in the Great Lakes, and explore how changes in technology and society may lead to the sustainable use of this most limiting resource. Fulfills either the Science/Math/Tech or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 354 Science in the 21st Century **3 Credits**
Topics include the technology gap, global warming, genetically modified foods, alternative fuels, global food security and environmental stewardship. The seminar will explore the scientific underpinnings of the scientific discussions of our time, focusing on science fact, societal needs (nutrition), environmental concerns, population density, and global moral responsibility. Students will read primary literature, watch media reports, and debate scientific topics. Fulfills either the Science/Math/Tech or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 356 Pope Francis: 21st-Century Thinker **3 Credits**
Pope Francis' recent visit to the U.S. revealed that he speaks to our times, as well as pointing us to the future. He embodies a new kind of religious life that is not locked into 20th-century Catholic issues like pre- and post-Vatican II. Likewise, he calls all people beyond the tired polarities of left vs. right wing, Western vs. non-Western, religious vs. spiritual, and so forth. To understand his theology and philosophy more deeply, we will consider Francis' two formal documents as pope, i.e., his 2013 apostolic letter Evangelii Gaudium and his 2015 encyclical Laudato Si. We will also read his writings on spirituality and his fresh insights into the Ignatian way of life. Furthermore, we will see how his life story has shaped his message, via Austen Ivereigh's detailed and highly regarded biography. Finally, we will appreciate how the world of art and popular culture have responded to this compelling and inspiring leader. Fulfills either the Religious Studies or Philosophy requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 357 Global Pentecostalism **3 Credits**
Through the interdisciplinary lenses of history, theology, anthropology and sociology, this course examines the nature, history, and global manifestations of Pentecostalism--'The Third Force in Christianity.' Fulfills the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 358 Women and Religion **3 Credits**
This course will analyze religion as it has affected the roles and status of women. We will examine four major religious traditions--Judaism, Christianity, Islam, and Hinduism--as well as the modern Goddess movement. Each unit will consider gender within the historical development of the religion, as well as its effect on modern practices. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 359 Spiritual Autobiography **3 Credits**
Considers the characteristics and patterns of spiritual autobiographies, analyzes these texts within the historical, cultural and religious developments of each author's time period, and evaluates modern spiritual autobiographies for their connections to the students' own experiences. Sample autobiographies include those of Augustine of Hippo, Vera Brittain, John Bunyan, Edward Gosse, and Ignatius of Loyola. Fulfills either the Religious Studies or Literature requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 360 Topics in Modern Christianity **3 Credits**
After a brief historical survey of the Christian tradition, we will explore issues in modern Catholicism. These include Vatican II, Liberation Theology, the priest sex scandal, the decline in Catholic allegiance in Latin America, the Charismatic movement, and the Francis Effect. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 363 The Bible & Popular Culture **3 Credits**
This class will examine pop culture references to the Bible, including those found in art, music, literature, television, film, and social media. We will critique these uses of the Bible and attempt to sort out their implications. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 364 Living Religions in Buffalo **3 Credits**
Religious beliefs and practices play a significant role in the lives of many people around the world. Religious differences have also led to conflicts and problems. In this class, we will explore world religions through encounters with members of religious communities present in Buffalo.

HON 370 Life-Writing: The Art of Biography **3 Credits**
This course will introduce students to classics in the genre of biography from the ancient world to the present, and explore the fundamental theoretical issues underlying the writing and reading of lives. Students will write both as critics and as biography. Fulfills the Literature requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 371 From Argonaut to Avenger, Son of God to Superhero: Religion, Myth, and the Evolution of the Hero **3 Credits**
This new interdisciplinary Honors course will examine the mythic and religious traditions of the heroes of the Ancient Near East, Greece, and Rome, and their continuing influence upon the themes and motifs found in the "'super'" heroes of the comic book age. The course will thus chart the cultural transformation of the idea of the "hero" from a religiously venerated human, to its contemporary association with fictional costumed crime-fighters.
Restrictions: All-College Honors Program students only, or by permission of the program director.
Offered: occasionally.

HON 373 Living Writers **3 Credits**
An examination of contemporary literature written by published authors who will visit our class. We will pay special attention to how assigned books reflect and respond to particular contemporary realities, such as the trauma of war, cultural upheaval, spiritual crisis, racial tension, and the challenge of achieving intimacy in a technological world. Fulfills the Literature requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 374 A Novel Nation: American Literature & Philosophy in the 19th Century **3 Credits**
This team-taught course will explore major 19th-century American literary and philosophical movements, including romanticism, transcendentalism, sentimentalism, pragmatism, and realism. We will read a range of different genres, from essays, poems, novels, short stories, slave narratives, and memoirs, and see how literature and philosophy complement each other as disciplines and how they differ. Fulfills either the Literature or Philosophy requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 379 Remodeling Old Texts **3 Credits**
This course will explore the phenomenon of adapting classic literary narratives to modern sensibilities in order to consider contemporary issues. More than simply 'updating' classic texts, these remodelings of texts attempt to elicit deeper understandings to give voice to marginalized characters, or to highlight truths embedded within the texts. Fulfills the Literature requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 380 Modern American Novel **3 Credits**
A general introduction to major American writers from 1920 to the present. Unlike traditional survey courses, this course will not be structured chronologically. Rather, we will explore authors in tandem, examining how different generations, genders, and ethnicities approach a similar topic. We will, of course, deal with the historical, chronological inheritances inherent in the texts, but they will not be read in order. Fulfills the Literature requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 381 Contemporary Literary Movements **3 Credits**
We will examine four major literary movements of the last half of the 20th century, i.e., the Beat Generation, the Latin American Boom, Ethnic Minority literature, and Gay & Lesbian writing, focusing on two major writers from each movement. Fulfills the Literature requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 382 Detective Fiction **3 Credits**
Explores how detective fiction has evolved in various social, political, cultural, historical, and linguistic contexts from its American and British origins to a more global context. The course examines how the genre functions as social commentary in these contexts. Students will address various topics, especially the relationship that different cultures, societies, ethnicities, and other groups have toward the law and justice, which is distinctly different from Anglo-American jurisprudence. They will also explore how the social, cultural, and political realities of the American South and Southwest, Italy, Spain, the Caribbean, and Latin America, and their often repressive and violent histories, make detective fiction in these locales somewhat different than that experienced in mainstream markets in the U.S. and the UK. By studying theoretical perspectives, students will enhance their skills in literary analysis. Fulfills the Literature requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 383 Rock & Roll and Literature **3 Credits**
In this seminar, we will look at the literature of Rock & roll--fiction, poetry, memoir, and journalism--that addresses one of America's most loved musical forms. While our study will not be limited to American writing, we will explore the ways that Rock & Roll is particularly American. What exactly does Rock & roll bring to th elistener, and is that more than just music? We will consider the ways in which Rock & roll acts as a destructive and redemptive force, and the ways it interacts with gender and cultural identity. We will look at the "revolutoinary spirity of rock and roll," as Patti Smith called it, and how it has been both a catalyst of change and a sign of it. We will be listening, too. Each work will have a soundtrack, so we will read the books in the context of their songs. As for writing assignments, students will produce analytical essays and other styles of writing about music. Fulfills the Literature requirement in Honors, as well as the American Experience attribute.
Offered: Occassional.

HON 384 American Immigrant Voices **3 Credits**
In this literature course, we will explore contemporary American immigrant voices in fiction and poetry. We will look to answer several questions: What are the themes and preoccupations of contemporary American literature by and about immigrants? What similarities and differences might we see in the stories from writers who come from different countries? How is literature written by immigrants in America changing? What role do immigrant voices play in American literature as a whole? Selections from Junot Diaz, Chimamanda Ngozi Adichie, NoViolet Bulawayo, and Cohn Toibin. Fulfills the Literature requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 385 Modern Myths and Fairy Tales **3 Credits**
Students will explore the continuing influence of fairy tales and Greek and Roman myths on contemporary literature. In addition, we will consider the cultural contexts of the initial versions of the stories and their more recent retellings, and we will analyze the works from several critical standpoints, including historical and feminist. Fulfills the Literature requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 386 Rise of the American Novel **3 Credits**
A study of the phenomenon of the American novel and its many characteristics and we will question the construction of a linear narrative of the novel's rise. Since the first American novel appeared in the same month as the nation's Constitution, we will look closely at the complex relationship between the novel and the nation. We will approach the novel as the place where American authors worked out and displayed their hopes and fears for the young republic. Thus, we will examine how authors use their novels to construct a national identity; to negotiate anxieties regarding who should and should not rule; to comment on the incorporation or exclusion of the non-English "other"; and to create proper gender, racial, and class rules for its new citizens. Restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 388 Major American Writers **3 Credits**
This new course will serve as a general introduction to major American writers from colonial times to the present. As such, this course will be loosely organized around the theme of freedom, the quintessential myth of American identity. We will explore creative responses to the personal experience of oppression and resistance, particularly in relation to inequalities experienced because of race and gender. We will also examine the American experience in terms of religious and sexual freedom. The course will be particularly focused on what authors have to say about the nature of freedom, or its absence, and how to achieve it on an individual level. Fulfills the Literature requirement in Honors, as well as the American Experience attribute.
Offered: Occassional.

HON 389 Nation, Homeland, and Diaspora in Contemporary Middle East Film **3 Credits**
This All-College Honors course seeks to introduce students to a wide range of contemporary (post-2000) films from the Middle East and North Africa. In this seminar we will analyze examples of twelve or thirteen feature films from these regions, paying particular attention to how filmmakers represent and comment on the social and political conditions that shape the lives of everyday people. Fulfills either the Fine Arts or Literature requirement in Honors.
Prerequisite: HON 101.
Offered: occasionally.

HON 393 Buffalo, a Literary City **3 Credits**
Buffalo and its surrounding communities comprise one of the country's richest literary environments. Historically it shaped the lives and careers of Mark Twain and F. Scott Fitzgerald; over the last century, it gave a home to poets like Pulitzer Prize winner Carl Dennis, two-time Pulitzer nominee, National Book Award and Emmy Award winner Lucille Clifton, and influential modernists Robert Creeley and Charles Olson. Its outstanding prose writers include Joyce Carol Oates—long rumored to be a future Nobel Prize winner—historical fiction writer Lauren Belfer, young-adult author Connie Porter, Edgar Award winning mystery writer Gary Earl Ross, and journalist and memoirist Tim Russert. Join us for an examination of the work of the previously mentioned authors, along with some glimpses at the writing of several notable Canisius faculty and alums, writers for other media, and some of this area's up-and-coming literary artists.

HON 430 Tutorial **3 Credits**
This course will be conducted as a tutorial in the Oxbridge (Oxford & Cambridge Universities) style, i.e., one or two students will meet with the instructor once weekly to discuss readings and write & revise papers. Interested students should contact the instructor for mutually agreeable topics.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 451 Thesis **3 Credits**
Independent research on topic selected by student, culminating in a research paper or creative writing project. Students work closely with their faculty advisers.
Restriction: junior or senior standing in the honors program.
Offered: fall & spring.

HON 499 Independent Study **3 Credits**
Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Liberal Arts and Sciences Requirement

New York State guidelines mandate a minimum number of credits in the liberal arts and sciences for each specific undergraduate degree. Furthermore, the guidelines indicate that these credits should not be directed toward specific occupational or professional objectives.

- Students earning an associate of arts degree must complete a minimum of 45 credits in the liberal arts and sciences.
- Students earning a bachelor of arts degree must complete a minimum of 90 credits in the liberal arts and sciences.
- Students earning a bachelor of science degree must complete a minimum of 60 credits in the liberal arts and sciences

What comprises the liberal arts and sciences?

The liberal arts and sciences comprise the disciplines of the humanities, natural sciences, mathematics, and social sciences. Our degree audit program (GriffAudit) verifies this requirement based on the New York State guidelines. The guidelines indicate that the following areas should be included in the liberal arts and sciences:

Humanities

- English—composition, creative writing, history of language, journalism, linguistics, literature, literature in translation, playwriting
- Fine arts—art appreciation, history or theory
- Foreign languages—composition, conversation, grammar, history of the language, literature of the language, reading, translation studies
- Music—music appreciation, history or theory
- Philosophy—comparative philosophy, history of philosophy, logic, schools of philosophy
- Religion—comparative religion, history of religion
- Theater—dramatic interpretation, dramatic literature, dramaturgy, history of drama, playwriting

Natural sciences and mathematics

- Natural sciences—anatomy and physiology, biology, chemistry, earth science, geology, physics, zoology
- Mathematics—calculus, mathematical theory, statistics
- Computer Science—broad survey/theory courses

Social sciences

- Anthropology, cultural studies, economics, geography, government, history, political science, psychology, sociology
- Criminal justice—introductory and broad survey courses
- Communications—interpersonal communication, mass communication, public speaking, speech and rhetoric

Examples of course types that are not considered within the liberal arts and sciences include:

- Agriculture
- Business—administration, finance, human resources, management, marketing, production
- Computer applications (e.g., word processing, database, spreadsheet), programming (e.g., specific languages)
- Health and physical education
- Home economics
- Education and teaching methods
- Library science
- Music—studio, performance, practice courses—voice, instrument, direction, conducting
- Office technologies and practice
- Performing and related arts—acting, costume design, dance, direction, lighting, production, scene construction, sound production
- Specialized professional courses in such fields as accounting, architecture, dental hygiene, dentistry, engineering, law, medicine, nursing, nutrition, pharmacy, podiatry, veterinary medicine
- Studio art—drawing, painting, ceramics, sculpture
- Technology/technician fields—construction, data processing, electrical, electronics, graphic arts, mechanical, medical, refrigeration repair
- Television and radio production
- Theology—pastoral counseling, ministry

Service Learning

Forming Women and Men for Others Through Academic Courses

Service-Learning (SL) is the incorporation of community service within academic courses, together with structured reflection upon that experience and its connection to the course. The service becomes "a text" within the course. It is called service-learning when it is required within a course. SL is experiential education. It can also contain immersion experiences and researching community needs.

As an educational method, service-learning provides students with fertile ground on which to test theories acquired in the classroom and put them into practice in the community.

Research has indicated that students involved in service-learning courses agree that their service experience helped them better understand the course, and has benefited them personally. Service-Learning is also "values education." The development and formation of values arise out of a social consciousness of the situation of "the other", especially the other who is deprived in some way. Service-Learning attempts to make students more aware of social injustices, causes them to consider serious civic engagement in society and introduces them to the challenges and possibilities of systemic change. The integration of service-learning into an undergraduate or graduate course has five key components:

1. Service activities are required. The number of service hours can vary, but the suggested norm over a semester is 15-20.
2. Clear connections exist between service activities and the academic course.
3. Service activities benefit the people receiving the service, the students, the service partner and the university in a significant way.
4. Students engage in a carefully articulated reflection process around the service, the connection to the course and the way in which the experience has affected them.
5. Assessment of the outcomes of the service experience is done through evaluations by the service agency, the student and the professor.

For more information, go to the Center for Service-Learning website (https://www.canisius.edu/academics/office-academic-affairs/center-service-learning/).

Study Abroad

Students who study abroad say that it is a life-changing experience. Whether you spend a semester, a summer, or a year abroad, living and learning in another country will open the doors to unique personal and professional experiences as well as improve foreign language skills. Some programs enable students to work as volunteers or interns during their stays and combine language and culture courses with their academic work. The Office of Study Abroad (https://www.canisius.edu/study-abroad/) and International Partnerships (https://www.canisius.edu/global-education/international-student-programs/) is continually improving and increasing the options made available to Canisius students interested in expanding their horizons. Canisius offers study abroad programs in the following locations:

- Antwerp, Belgium — University of Antwerp
- Barcelona, Spain-IQS Universidad Ramón Llull
- Berlin, Germany — Berlin School of Economics and Law
- Dortmund, Germany — Technical University of Dortmund
- Eichstaett, Germany — Catholic University of Eichstaett
- Florence, Italy — Lorenzo de' Medici University
- Galway, Ireland — National University of Ireland at Galway
- Glasgow, Scotland — University of Glasgow[1]
- Lille, France — The Catholic University of Lille-IESEG School of Management
- Lima, Peru — Universidad del Pacifico
- London, England — London Metropolitan University
- Madrid, Spain — Pontifical University Comillas
- Manila, Philippines - Ateneo de Manila
- Oviedo, Spain — University of Oviedo
- Paris, France — IESEG School of Management
- Queensland, Australia — University of the Sunshine Coast
- Rio de Janeiro, Brazil — Pontifical Catholic University of Rio de Janeiro
- Rome, Italy — Lorenzo de' Medici University

- Seoul, Korea — Sogang University
- Strasbourg, France — University of Strasbourg, School of Management (one-year dual degree program available)
- Tokyo, Japan — Sophia University

[1] Open only to students in the All-College Honors Program.

Students interested in study abroad should begin planning early in their college experience so that preliminary coursework and language study can be completed in advance. Students should confer with the Study Abroad office and with their academic advisor to discuss the options.

Pre-Professional Programs

In addition to undergraduate majors and minors, Canisius offers several pre-professional programs. Students still must complete a major, but these programs help prepare students to meet the admissions requirements for professional schools. Please note that often different professional schools have specific individual requirements and students are encouraged to work with the pre-professional advisor for the program to ensure that they are meeting the requirements for the schools to which they intend to apply. Detailed information about the program is available within its section of the catalog. Please note that there is a general page for Pre-Medical and Pre-Health Professions in addition to specific information on each specific program.

- Pre-Law (p. 57)
- Pre-Medical and Pre-Health Professions (p. 59)
  - Pre-Dental Medicine (p. 56)
  - Pre-Medicine (p. 60)
  - Pre-Optometry (p. 61)
  - Pre-Pharmacy (p. 62)
  - Pre-Veterinary Medicine (p. 63)

Pre-Dental Medicine

Introduction

Students interested in a career in Dental Medicine have the option of pursuing any major along with completing specific prerequisites. Students must gain a thorough understanding of the profession through a range of shadowing experiences, demonstrate a commitment to service, and earn a competitive score on the Dental Admission Test (DAT). Students should work with the Pre-Med Advisor beginning in the first college year to select appropriate coursework based on their schools of interest, and to plan for appropriate co-curricular experiences. Students applying to dental schools receive a letter of evaluation from the Health Science Advisory and Recommendation Committee. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 59).

Joint and Early Assurance Programs

Canisius College maintains a relationship with the LECOM School of Dental Medicine (Bradenton, FL) which allows highly qualified students to gain early acceptance into dental school. Students may apply into this 4+4 program at the same time they apply to Canisius while in high school. Students may also apply to this program during the freshman or sophomore year of college. Canisius will also assist students applying into the University at Buffalo School of Dental Medicine Early Assurance Program during the sophomore year.

Recommended Pre-Dental Courses

Academic admission requirements vary by dental school, but usually include the following courses:

English

One year of English composition or the Honors Program equivalent.

Code	Title	Credits
ENG 111	Academic Writing	3
ENG 112	Writing about Literature	3

Note: Students who entered Canisius prior to fall 2018 can fulfill this requirement with FYS 101 and ENG 101. Honors students can fulfill this requirement with HON 101 or any HON literature course.

Biology

At least one year of general biology with laboratory:

Code	Title	Credits
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory [1]	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

[1] Students may take CHM 109, CHM 110, and CHM 111L to fulfill this requirement.

Physics

One year of introductory physics with laboratory:

Code	Title	Credits
Select one of the following:		
Option 1:		
PHY 201 & 201L	College Physics I and College Physics I Laboratory	
PHY 202 & 202L	College Physics II and College Physics II Laboratory	
Option 2:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	

Additional Pre-Dental Recommended Courses

Additional Pre-Dental courses may be needed depending on which schools students intend to apply to. Students school work with the PreMed Center for assistance in identifying additional courses.

Mathematics

Math requirements vary at the different dental schools. We recommend students take a minimum of either statistics (MAT 141 or PSY 201) or calculus (MAT 111). Chemistry majors must take MAT 141.

Behavioral/Social Science

One semester each of psychology (PSY 101 or PSY 102) and sociology (SOC 110). The behavioral science and humanities requirements vary at dental schools.

Biochemistry

Some dental schools require one semester of biochemistry (including the University at Buffalo). Students may take biochemistry in either the Biology Department (BIO 211-BIO 212 take both courses) or Chemistry Department (BCH 301-BCH 302 take one or both courses).

Additional Science Courses

Students not majoring in the sciences should elect additional upper-level coursework in the sciences. Some dental schools have additional biology courses required. Please work with a Pre-Med advisor to select courses.

Pre-Law

The Frank G. Raichle Pre-Law Center
Pre-Law Committee: Robert Klump, Esq., Director, Frank G. Raichle Pre-Law Center; Patricia Erickson, Professor Emerita of Criminal Justice; Peter J. Galie, Professor Emeritus of Political Science; and Helen Ferraro-Zaffram, Esq., Board Member, Desmond Law Society

The Frank G. Raichle Pre-Law Center assists students who wish to enter the legal profession by offering counseling and advisement regarding law schools and the Law School Admissions Test and by providing several partial pre-law scholarship awards to juniors and seniors. Internship and other opportunities are enhanced by the work of the college's Pre-Law Advisory Council

The Raichle Center also sponsors an annual lecture series on problems of law and American society. Raichle Lectures have included six justices of the U.S. Supreme Court.

Students interested in law are encouraged to contact the Director or another member of the pre-law committee at their earliest opportunity and are encouraged to join the pre-law fraternity, Phi Alpha Delta.

Pre-law students may wish to consider joining the college's Mock Trial team and enrolling by instructor's permission in the one credit Mock Trial course (LEG 101)

Canisius College does not offer a Pre-Law Major, rather we offer a program that prepares students to succeed both in law school and in the legal profession. Students wishing to choose law as a career may major in any field or fields as undergraduates. They should bear in mind, however, that their aim must be the attainment of a broad liberal education. Specifically, they should attain considerable skill in language, knowledge of human institutions and values and an ability to reason critically. The committee therefore recommends that students wishing to choose law as a career include in their undergraduate programs of study the following:

1. Courses which develop skills of accurate comprehension and precise expression in language.
2. Courses in which knowledge of human institutions can be attained, with special reference to American constitutional law and history.
3. Courses which develop abilities in logic and appreciation of ethical and political values.
4. Courses in introductory accounting and economics.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please visit the Pre-law webpage (https://www.canisius.edu/academics/programs/pre-law/).

The Program

Freshman Year

Introduction to the Raichle Pre-law Center

Attend New Student Orientation Program Session (Fall)

Phi Alpha Delta Membership

Consider membership in Desmond Pre-Law Chapter of Phi Alpha Delta Law Fraternity (Fall induction)

Raichle Pre-Law Center

Attend Comprehensive Presentation by Raichle Center Director Robert Klump and former Director Peter Galie at which the following aspects of the law school application process and the legal profession will be addressed. All pre-law students are invited to attend (Fall)

- What is the legal profession all about?
- Varieties of practice, e.g. law firm, in-house, government.
- What opportunities does a law degree provide in addition to the practice of law?
- The current state of the legal job market.
- The cost of attending law school and financing law school education.
- Building a resume that will help get you into law school.
- Choosing a curriculum that will be attractive to law school admissions committees.
- Internship opportunities.
- The LSAT (Law School Aptitude Test): how to prepare; when to take.

Sophomore Year

Phi Alpha Delta Membership

Consider membership in Desmond Pre-Law Chapter of Phi Alpha Delta Law Fraternity *Fall induction*

Course Selection

Consider pre-law Recommended Electives in selecting courses *Fall/Spring*

RAICHLE PRE-LAW CENTER

Attend Comprehensive Presentation by Raichle Center Director Robert Klump and former Director Peter Galie at which the following aspects of the law school application process and the legal profession will be addressed. All pre-law students are invited to attend (Fall)

Pre-Law Scholarship Competition
Sophomores satisfying eligibility requirements may apply for a partial pre-law scholarship for their junior year; several scholarships are awarded on a competitive basis by the Pre-Law Committee *Spring*

Junior Year
Course Selection
Consider pre-law Recommended Electives in selecting courses *Fall/Spring*

RAICHLE PRE-LAW CENTER
Attend Comprehensive Presentation by Raichle Center Director Robert Klump and former Director Peter Galie at which the following aspects of the law school application process and the legal profession will be addressed. All pre-law students are invited to attend (Fall)

Pre-Law Scholarship Competition
Juniors satisfying eligibility requirements may apply for a partial pre-law scholarship for their senior year; several scholarships are awarded on a competitive basis by the Pre-Law Committee (Spring)

Internships
Juniors interested in doing a law-related internship during the summer preceding senior year should submit an application and supporting materials to the Director *Spring*

Getting into Law School
A Strategy for Success

A service provided by the Raichle Pre-Law Center consisting of one-on-one counseling during the Spring semester on the law school application process, including the following topics:

- Selecting the right law school.
- Applying to law school including early admissions.
- Preparing for the LSAT, including course offered on campus by Kaplan.
- Writing the personal statement.
- Updating resumes.
- Obtaining letters of recommendation.

Senior Year
RAICHLE PRE-LAW CENTER
Attend Comprehensive Presentation by Raichle Center Director Robert Klump and former Director Peter Galie at which the following aspects of the law school application process and the legal profession will be addressed. All pre-law students are invited to attend (Fall)

One-on-one advisement sessions on the law school application process, including: whether and when to retake the LSAT; strategies for enhancing chances for admission at particular schools; negotiating scholarship and financial aid offers; selecting which law school to attend. *Fall/Spring*

Recommended Electives

It is recommended that pre-law students consider taking one or more of the following courses. Not all courses listed are offered every semester or academic year; check availability during course registration.

Information after the course title is provided to help students understand the reason each course is recommended as a potential elective.

Code	Title	Credits
Accounting		
ACC 201	Financial Accounting (introduction to financial concepts relevant to study of business-related law school courses such as taxation and corporate law)	3
ACC 202	Managerial Accounting (introduction to financial concepts relevant to study of business-related law school courses such as taxation and corporate law)	3
Classics		
CLS 300	Roman Law and Society (the origins and development of civil and statutory law in the Western legal tradition)	3
Criminal Justice		
CRJ 250	Criminal Law and Procedure	3
CRJ 280	Language for Legal Professions	3
Economics		
ECO 101	Principles of Macroeconomics (introduction to the economic system that undergirds and plays a major role in our legal system)	3
ECO 102	Principles of Microeconomics (introduction to the economic system that undergirds and plays a major role in our legal system)	3
English		
ENG 385	Rhetoric and Composition (refinement of professional writing)	3
Philosophy		
PHI 225	Logic (preparation for LSAT)	3
PHI 241	Ethics: Traditions in Moral Reasoning (ethical standards relevant to the practice of law)	3
PHI 261	Philosophy of Law (philosophical underpinnings of law)	3
Political Science		
PSC 103	The American Constitution (constitutional foundations of governmental power)	3
PSC 320	American Constitutional Law I (introduction to law school case method, i.e. use of court decisions to exemplify legal principles, acquisition of substantive knowledge of major areas of law)	3
PSC 321	American Constitutional Law II (introduction to law school case method, i.e. use of court decisions to exemplify legal principles, acquisition of substantive knowledge of major areas of law)	3
PSC 420	The Constitution, The War on Terror and Civil Liberties (introduction to law school case method, i.e. use of court decisions to exemplify legal principles, acquisition of substantive knowledge of major areas of law)	3
PSC 345	Transnational Crime After 9/11 (substantive knowledge of legal mechanisms to promote responses to fight cross border crime, such as terrorism and drug trafficking)	3

The following courses are available as options for any student, particularly those interested in legal careers.

LEG 101 Mock Trial **1 Credit**
Acquire knowledge of trial proceedings, rules of evidence and courtroom skills necessary to qualify for Mock Trial team membership; prepare for and compete in Mock Trial tournaments. Students may take this class up to 4 times for credit.
Prerequisite: permission of instructor.
Offered: fall & spring.

LEG 201 Legal Reasoning, Writing and Advocacy **3 Credits**
Examine process and techniques which lawyers use to advocate effectively in the American legal system. Analyze the art of legal argument, decision-making and reasoning. Draft legal briefs and memoranda, including use of precedent.
Offered: typically fall semester.

Pre-Medical and Pre-Health Professions

Program Director: Allyson D. Backstrom, PhD (backstra@canisius.edu)

Introduction

The Dr. George E. Schreiner '43 Pre-Medical Center has been established to enhance the quality of the undergraduate experience for students who wish to enter the many fields of medicine and the health professions including medicine (allopathic and osteopathic), dentistry, podiatry, optometry, physician assistant, pharmacy, physical therapy, occupational therapy, chiropractic, nursing, public health, and veterinary medicine among others. The Pre-Medical Center supports students through one-on-one advising, hosting seminars to assist students learning about various health careers and professional schools, connecting students with shadowing and volunteer activities, and assisting students with the application process to gain entry into professional schools. It is important to understand that Pre-Med/Health Sciences is a support program and not an academic major. Students interested in careers in medicine and other health professions may major in any academic area they choose. While students frequently major in biology, chemistry, biochemistry or psychology, students also major in Spanish, mathematics, history, classics, English, management and philosophy among others. Further information can be found in the catalog sections for each major. Along with the academic major requirements, students complete specific course requirements for the health professional schools of choice. All programs require a broad liberal arts education which is achieved through the Core Curriculum or the All College Honors Program. Specific requirements vary from one professional school to another so it is important for students to utilize the advising services of the Pre-Medical Center beginning in their first college year. For a more detailed description of the program please go to the Pre-Med/Pre-Health website (https://www.canisius.edu/academics/programs/pre-medical-and-pre-health-professions/).

Advisement

All pre-med/pre-health students should register with the PreMed Center upon arrival at Canisius their freshman year. Additionally, students who develop an interest in the health professions after matriculating at Canisius are able to register with the PreMed Center at any time. Pre-Med advisors assist students in all aspects of their preparation for entry into the health professions and serve in addition to academic major advisors. All students should work closely with the advisor in their major and the Pre-Med Advisor in discussing career expectations, choosing major electives, developing their entire academic program, and planning co-curricular or supplemental academic experiences. This process should start in the first college year. The PreMed advisors assist students in completing appropriate documentation each year to maintain good standing in the Pre-Med/Pre-Health program.

Qualifications

To meet minimal requirements for most health professions, students must maintain a minimum GPA of 3.0. Students with a GPA lower than this should contact the Pre-Med Advisor for assistance. Higher GPAs are needed to be competitive applicants for most health professions with many programs looking for a GPA of 3.6. Science GPAs are often evaluated separately and must also be competitive. Competitive scores on professional exams (MCAT, DAT, GRE, PCAT, OAT, etc.), demonstrated commitment to serving others, and thorough exploration and understanding of the desired profession are also critical. Full understanding of the profession includes multiple shadowing experiences with different professionals over time and clinical volunteer experiences. The Pre-Medical Center will help students plan appropriately for each of these qualifications. Special academic seminars, internships, and medical travel opportunities are also available.

Early Assurance and Joint Degree Programs

Canisius College maintains relationships with health professional programs allowing students to gain early acceptance into medical, dental, pharmacy, optometry, and veterinary programs among others. Relationships with professional schools also allow for students to be admitted into joint programs upon enrolling at Canisius as freshmen or during the first or second college year. These programs are competitive and appropriate for the highly motivated student who has thoroughly explored the health professions to develop an understanding of and commitment to their chosen profession. Depending on the program, an outstanding high school record or early record in college is required. Please contact the Pre-Medical Center for the most up-to-date details on the various programs.

Early Assurance Program

A Pre-Medical Early Assurance program at Canisius is offered in conjunction with the Lake Erie College of Osteopathic Medicine (PA and FL campuses). A Pre-Dental Early Assurance program is offered in conjunction with the LECOM School of Dental Medicine (Bradenton, FL). The Pre-Medical Center also works with students to apply to Early Assurance Programs open to students at all colleges such as the University at Buffalo School of Dental Medicine and the State University of New York Upstate Medical University (Syracuse, NY) College of Medicine and the Doctor of Physical Therapy programs. A Pre-Pharmacy Early Assurance Program is offered in conjunction with the LECOM School of Pharmacy (PA and FL campuses) and D'Youville College. An Early Opportunity in Medicine Program (http://medicine.buffalo.edu/oiace/education/education/early-opportunity-medicine.html) for qualified applicants from groups historically underrepresented in medicine is offered in conjunction with the SUNY University at Buffalo Jacobs School of Medicine and Biomedical Sciences.

Joint Degree Programs

Canisius College has seven-year joint degree programs with the following professional schools; Lake Erie College of Osteopathic Medicine, University at Buffalo School of Pharmacy, LECOM School of Pharmacy, D'Youville College School of Pharmacy, and the SUNY State College of Optometry, among others. The first three years are spent at Canisius and the last three or four years at the professional school. A bachelor's degree (BS) will be awarded from Canisius College after completion of the first professional year of osteopathic medicine, pharmacy, or optometry school. The DO, PharmD, OD or other appropriate professional degree will be awarded at the end of seven years. To remain in good standing, students must

fulfill all requirements established by the professional school. A Jesuit University consortium guarantees an interview for students who meet GPA requirements and are applying to pharmacy programs at Jesuit schools. University of Guelph Ontario Veterinary College has also reserved seats for Canisius students.

Courses

HRP 101 Introduction to Health Professions **1 Credit**
This course is designed for students who are considering careers in the health-related professions: medical, dental, and allied health fields. The health professions are one of the largest growing industries in the country, and many options exist for students to consider. In this course students will gain a greater understanding of the various health-related professions and hear from practitioners and clinicians who are currently working in the field. This is a 1-credit hour course and will meet once per week.
Offered: occasionally.

HRP 111 Medical Terminology **1 Credit**
This introductory course in medical terminology focuses on prefixes, suffixes, word roots and their combinations to build basic medical vocabulary. Terminology related to anatomy, physiology, symptomology, and pathology will be included.
Offered: spring.

HRP 201 Topics in Health Professions Seminar I **1 Credit**
These seminars facilitate in-depth exploration of special topics in health and health care such as Primary Care, Social Medicine, and Medical Specialties.
Prerequisite: permission of the program director.
Offered: occasionally.

HRP 202 Topics in Health Professions Seminar II **1 Credit**
These seminars facilitate in-depth exploration of special topics in health and health care such as Primary Care, Social Medicine, and Medical Specialties.
Prerequisite: permission of the program director.
Offered: occasionally.

HRP 498 PEPID Medical Informatics Internship **3 Credits**
The purpose of this internship is to introduce students to the concepts of medical informatics. This overview course will provide a broad exposure to the field of informatics and the students will learn how information is created, interpreted, processed, stored and applied in healthcare with the help of modern technology. Travel out of state is required.
Prerequisite: permission of the program director & competitive application to PEPID.
Offered: fall & spring.

HRP 499 Health Professions Internship **1-3 Credits**
Research or other practical experience related to the health professions.
Prerequisite: permission of the program director.
Offered: fall & spring.

Pre-Medicine

Introduction

Students interested in a career in allopathic (MD) or osteopathic (DO) medicine have the option of completing a four-year degree in any major along with completing specific prerequisites. Medical school admission is very competitive and students should work closely with the Pre-Med Advisor throughout their college years to stay on track with both academic and co-curricular preparation. Students should gain clinical experience through hospital volunteerism and shadowing physicians. Academic admission requirements vary somewhat by medical school. The Medical College Admission Test (MCAT) includes some content from courses not specifically required by all medical schools. Students must complete coursework that both satisfies medical school requirements and also prepares them to score well on the MCAT. Students applying to medical schools receive a letter of evaluation from the Health Science Advisory and Recommendation Committee. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 59).

Joint and Early Assurance Programs

Canisius College students may apply to Early Assurance programs (4+4) at the State University of New York Upstate Medical University (Syracuse, NY) College of Medicine and the Lake Erie College of Osteopathic Medicine (PA and FL campuses). Students apply to the Upstate program during the sophomore year. Students may apply to the LECOM program at the same time they apply to Canisius while in high school or during the freshman or sophomore year at Canisius. Highly qualified students may also apply to the LECOM joint seven-year (3+4) program in high school or the freshman year of college. A six-year (3+3) primary care physician pathway is also available through LECOM. Students in the LECOM programs with the appropriate academic indices are not required to take the MCAT. An Early Opportunity in Medicine Program (http://medicine.buffalo.edu/oiace/education/education/early-opportunity-medicine.html) for qualified applicants from groups historically underrepresented in medicine is offered in conjunction with the SUNY University at Buffalo Jacobs School of Medicine and Biomedical Sciences. Students apply to the EOPIM during the sophomore year.

Recommended Pre-Medical Courses

Recommendations include those courses needed to meet most medical school requirements and to prepare for the MCAT. Students must consult individual medical schools for additional specific requirements. The PreMed Center has resources to help students in this process.

English

One year of English composition (ENG 111 & ENG 112, or students who entered Canisius prior to fall 2018 may use FYS 101 and ENG 101) or the Honors Program equivalent (HON 101 and an Honors Literature course).

Biology

At least one year of general biology with laboratory: (Please note that some schools require an additional course in biology. Students work with the PreMed Advisor to plan for these additional courses.)

Code	Title	Credits
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory [1]	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4

CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

[1] Students may take CHM 109, CHM 110, and CHM 111L to fulfill this requirement.

Biochemistry

Students may take biochemistry in either the Biology Department (BIO 211-BIO 212) or the Chemistry Department (BCH 301-BCH 302).

Physics

One year of introductory physics with laboratory:

Code	Title	Credits
Select one of the following:		8
Option 1:		
PHY 201 & 201L	College Physics I and College Physics I Laboratory	
PHY 202 & 202L	College Physics II and College Physics II Laboratory	
Option 2:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	

Mathematics

Math requirements vary at the different medical schools. Most medical schools require one year of college level math. Some specifically require calculus, some specifically require statistics. The MCAT utilizes statistics typically learned through science courses. We recommend students take a minimum of one semester of statistics (MAT 141 or PSY 201) and strongly encourage students to also take one semester of calculus (MAT 111 or MAT 109/MAT 110). Chemistry majors must take MAT 141.

Behavioral/Social Science

One semester each of psychology (PSY 101 or PSY 102) and sociology (SOC 110). Some medical schools require more than two courses in the behavior/social sciences. The MCAT includes content from PSY 101, PSY 102 and SOC 110. If a student does not take both PSY 101 and PSY 102, they may learn some psychology content independently.

Elective Courses

Students not majoring in a science are encouraged to take additional science elective courses. Additionally, several specialized courses of interest are available to help students explore aspects of medicine and healthcare in more depth.

HRP 101 allows students to explore different health professions.

HRP 201 and HRP 202 allow students to explore areas of medicine in more depth.

HRP 498 is an internship in medical informatics.

Pre-Optometry

Introduction

Students interested in a career in Optometry have the option of pursuing any major along with completing specific prerequisites. Optometry schools typically require a minimum of 90 credit hours be completed at the undergraduate level and many prefer the bachelor degree be completed. Students must gain a thorough understanding of the profession through a range of shadowing experiences and earn a competitive score on the Optometry Admission Test (OAT). Students should work with the Pre-Med Advisor beginning in the first college year to select appropriate coursework based on their schools of interest, and co-curricular experiences. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 59).

Joint and Early Assurance Programs

Canisius College maintains a relationship with SUNY College of Optometry which allows students to gain early acceptance into optometry school. Highly qualified students may be admitted into this 3+4 program upon enrolling at Canisius as freshmen or during the freshman or sophomore year. Students in this program complete the Core Curriculum or the All College Honors Program and three years of the Chemistry Health Track major or a Biology major.

Recommended Pre-Optometry Courses

Academic admission requirements vary by optometry school, but usually include the following courses:

English

One year of English composition (ENG 111 & ENG 112 or students who entered Canisius prior to fall 2018 may use FYS 101 and ENG 101) or the Honors Program equivalent (HON 101 and an Honors Literature course).

Biology

At least one year of general biology with laboratory:

Code	Title	Credits
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory [1]	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

[1] Students may take CHM 109, CHM 110, and CHM 111L to fulfill this requirement.

Physics

One year of introductory physics with laboratory:

Code	Title	Credits
Select one of the following:		8
Option 1:		
PHY 201 & 201L	College Physics I and College Physics I Laboratory	
PHY 202 & 202L	College Physics II and College Physics II Laboratory	
Option 2:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	

Mathematics

One semester of statistics (MAT 141 or PSY 201) and one semester of calculus (MAT 111). Chemistry majors must take MAT 141. Some optometry schools suggest one year of calculus (MAT 111-MAT 112).

Psychology

One semester of psychology (PSY 101 or PSY 102).

Social Science and Humanities

Two courses. Sociology (SOC 110) is recommended.

Additional Pre-Optometry Course Suggestions

Biochemistry

Students may take biochemistry in either the Biology Department (BIO 211-BIO 212, take both courses) or the Chemistry Department (BCH 301-BCH 302, take either one or both courses).

Microbiology

One semester of microbiology (BIO 307).

Anatomy & Physiology

One semester of anatomy and physiology (BIO 114).

Pre-Pharmacy

Introduction

Students interested in a career in Pharmacy have the option of completing a four-year degree in any major along with completing specific prerequisites or completing only two or three years of study before starting pharmacy school, as long as the required courses are taken. Students should stay in contact with the Pre-Medical Center from their first college year for assistance in planning appropriately for entry into pharmacy schools. Most students at Canisius College choose the 4-year option majoring in either Chemistry (Health Professions Track), Biochemistry, or Biology. Majoring in other academic areas is also possible. Further information can be found in the catalog sections for each of those departments. Students must gain a thorough understanding of the pharmacy profession that includes shadowing or work experience in a pharmacy. Students must also earn competitive scores on the PCAT (Pharmacy College Admissions Test.) In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 59).

Joint and Early Assurance Programs

Canisius College has seven-year (3+4) joint degree programs with State University of New York at Buffalo School of Pharmacy and Pharmaceutical Sciences and D'Youville College School of Pharmacy, and both six- (3+3, PA campus) and seven-year (3+4, FL campus) joint degree programs with Lake Erie College of Osteopathic Medicine School of Pharmacy. These programs allow students to earn both the bachelor degree from Canisius College and the Doctor of Pharmacy degree from the partner institution. In these programs, students complete the Core Curriculum or the All College Honors Program and three years of the Chemistry Health Track major (courses approved by the chair of the Chemistry Department) or the Biology major (courses approved by the chair of the Biology Department). After the first year of pharmacy school, the bachelor degree is awarded by Canisius. Students also have the option to apply to a wide range of pharmacy schools under the 3+4 program. For more information regarding these programs contact the Pre-Med Advisor.

Recommended Pre-Pharmacy Courses

Academic admission requirements vary substantially by pharmacy school, but usually require the following courses:

English

One year of English composition (ENG 111 & ENG 112, or students who entered Canisius prior to fall 2018 may use FYS 101 and ENG 101) or the Honors Program equivalent (HON 101 and an Honors Literature course).

Biology

At least one year of general biology with laboratory (BIO 111-BIO 112). Most schools also require at least one year of Human Biology; Introduction to Human Anatomy and Physiology and Musculoskeletal Anatomy and Physiology with laboratory (BIO 114-BIO 115). Many programs also require Microbiology with laboratory (BIO 307).

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory [1]	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

Many schools also require Biochemistry (BCH 301 or BIO 211-BIO 212)

[1] Students may take CHM 109, CHM 110, and CHM 111L to fulfill this requirement.

Physics

One semester or one year of introductory physics with laboratory:

Code	Title	Credits
Select one of the following:		8
Option 1:		
PHY 201 & 201L	College Physics I and College Physics I Laboratory	
PHY 202 & 202L	College Physics II and College Physics II Laboratory	
Option 2:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	

Check schools of interest for the number of semesters required.

Mathematics

One or two semesters of Calculus (MAT 111 and MAT 112) and one (1) semester of statistics (MAT 141 or PHY 201). Some of the more competitive schools require one year of college level calculus. Chemistry majors MUST take MAT 141.

Humanities and/or Social/Behavioral Science

One to four semesters of psychology, sociology, anthropology, U.S. history, theology and/or philosophy. Some programs specifically require psychology.

Public Speaking

One semester of oral communications (COM 201)

Economics

One semester of macroeconomics (ECO 101) or microeconomics (ECO 102). Some programs specifically require ECO 102.

Pre-Veterinary Medicine

Introduction

Students interested in a career in Veterinary Medicine have the option of pursuing a major in any discipline along with completing specific prerequisites. Due to the significant biology requirements, most students pursue a major in this area. Veterinary medicine pre-requisites vary significantly from school to school. Students should work with the Pre-Medical Center to identify schools of interest and meet appropriate requirements. In addition to specific coursework, pre-vet students must gain significant experience with animals and shadow veterinarians. Many schools require the Graduate Record Exam (GRE). Students should participate in the local Veterinary Explorers organization. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 59).

Joint and Early Assurance Programs

Canisius College enjoys reserved seats for our students through a Memorandum of Understanding with Ontario Veterinary College at the University of Guelph. Visit the Pre-Medical Center for additional information and specific course details.

Recommended Pre-Veterinary Courses

Academic admission requirements vary substantially by veterinary medical school, but usually include the following courses:

English

One year of English composition (ENG 111 & ENG 112, or students who entered Canisius prior to fall 2018 may use FYS 101 and ENG 101) or the Honors Program equivalent (HON 101 and an Honors Literature course).

Biology

At least one year of general biology with laboratory:

Code	Title	Credits
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory [1]	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

[1] Students may take CHM 109, CHM 110, and CHM 111L to fulfill this requirement.

Biochemistry

Students may be able to take biochemistry in either the Biology Department (BIO 211-BIO 212) or the Chemistry Department (BCH 301-BCH 302). Students should check with individual schools for details regarding specific Biochemistry requirements.

Physics

One year of introductory physics with laboratory:

Code	Title	Credits
Select one of the following:		8
Option 1:		
PHY 201 & 201L	College Physics I and College Physics I Laboratory	
PHY 202 & 202L	College Physics II and College Physics II Laboratory	
Option 2:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	

PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory

Mathematics

One semester of statistics (MAT 141 or PSY 201). Some veterinary schools require more math such as calculus (MAT 111).

Additional Pre-Veterinary Course Requirements

Most schools require one semester of genetics (BIO 404) and many schools require one semester of microbiology (BIO 307).

The Urban Leadership Learning Community (ULLC)

Director: Michael Forest, PhD

The Urban Leadership Learning Community (ULLC) enables the best and brightest students from Greater Buffalo to enroll in a unique educational opportunity at Canisius. The ULLC offers students a four-year program to help create the next generation of leaders in Buffalo and Western New York from a population that historically has been denied positions of influence or power in Buffalo. The program provides its students with partial and full scholarships to cover tuition, room and board and fees. Moreover, through its many activities throughout a student's undergraduate career, the program fosters academic excellence, extra-curricular involvement and service to others, all through collaboration. ULLC students consider each other "family" who cooperate rather than compete with each other.

The ULLC enrolled its first class in Fall 2000 and experiences an impressive 80% four-year graduation rate. Almost 200 ULLC students have graduated since 2004, and currently there are about 40 ULLC students pursuing undergraduate degrees in a wide-range of majors.

Graduates have gone on to graduate programs and professions in education, medicine, business and social work or are employed in a variety of occupations.

ULLC students are required to take four, collaborative, non-lecture "Team Learning" courses for the core curriculum foundation courses. They have opportunities for more in a range of disciplines. The leadership activities that ULLC students participate in are many and varied and include: a Leadership Workshop Series, four workshops that investigate and apply leadership concepts to the demands of careers and good citizenship; a Summer Leadership Training Program for incoming freshmen, two weeks of intensive preparation for the demands of college life; the ULLC Council, class representatives to plan and promote program activities, such as the Annual Banquet. All ULLC students participate in one or more internships either related or ancillary to their career plans.

ULLC students hold offices in a wide range of campus activities; many of them study a semester abroad; and many participate in the Winter Service Week and Alternate Spring Break opportunities offered by the Office of Campus Ministry.

For further information, please contact Michael Forest (forestm@canisius.edu) (716-888-2328).

Academic Policies

Academic Policy Resource

Students with questions regarding academic policies or those seeking advice on handling situations related to grade grievances or violations of the code of academic integrity may wish to speak to someone outside the normal decision and appeal processes. Students are welcome to contact an advisor in the Griff Center for Academic Engagement or the associate vice president for academic affairs for an explanation of academic policies or general assistance in these matters.

- Code of Academic Integrity (p. 64)
- Grades and Policies (p. 67)
- Quality Points and GPA (p. 69)
- Academic Standing (p. 70)
- Academic Forgiveness Policy (p. 70)

Code of Academic Integrity

Code of Academic Integrity

Mission and Pledge

The Canisius College community is dedicated to academic excellence and is, therefore, committed to establishing and maintaining an atmosphere of trust. All members of the community agree and pledge to exercise complete integrity in their academic work. Academic integrity is the foundation of true intellectual growth; it demonstrates respect for oneself and for others.

The students, faculty and administration of Canisius College understand their responsibility for maintaining academic integrity to be both individual and collective. Fulfilling this responsibility requires us to uphold high standards in our own conduct and to exercise fairness towards each other. All instances of academic dishonesty are a breach of community standards. Students, administrators and staff, course instructors and their representatives are expected to report violations of the Code of Academic Integrity.

All members of the Canisius College community are committed to administering the Code of Academic Integrity in a manner consistent with our mission: to teach responsibility, to foster learning and to care for the intellectual and ethical development of the whole person.

Violations of the Code of Academic Integrity shall be dealt with in a manner which is just to all parties and contributes to the learning process. Sanctions shall be shaped by the belief that infractions are not simply occasions for punishment, but are opportunities for learning and for improving the ethical standards of the individual and the community.

All Canisius College students are automatically bound by the Code of Academic Integrity. As a reminder and reinforcement of the ideals this code embodies, course instructors are asked to place a pledge on scheduled tests and assignments, as well as in the course syllabus. Students, in turn, are asked to carefully consider and sign the pledge, which reads:

"As a member of the Canisius College Community I understand and will uphold the standards for academic behavior as stated in the Code of Academic Integrity."

· Standards for Academic Behavior

A. Prescriptions

Academic integrity requires a commitment to five fundamental values: honesty, trust, fairness, respect, and responsibility.

1. **Honesty**
   As an academic community of integrity, Canisius College requires intellectual and personal honesty in learning, teaching, research, and service. Honesty is the prerequisite for full realization of trust, fairness, respect, and responsibility. The policies of Canisius College discourage dishonesty in the forms of cheating, lying, fraud, theft, and other behaviors that jeopardize the rights and welfare of the college community and diminish the worth of its academic degrees. All members of the community subscribe to the principle of observing basic honesty in their work, words, ideas, and actions.
2. **Trust**
   As an academic community of integrity, Canisius College seeks to foster a climate of mutual trust, encourage the free exchange of ideas, and enable all members of the community to reach their highest potential. Trust creates an environment in which collaboration is valued and information and ideas can be shared without fear of one's work being stolen. It also allows us to believe in the social value of our scholarship and the degrees that are achieved here.
3. **Fairness**
   As an academic community of integrity, Canisius College seeks to set clear standards, practices and procedures, and expects fairness in the interactions of all members of the community.
4. **Respect**
   As an academic community of integrity, Canisius College recognizes the participatory nature of the learning process and honors and respects a wide range of opinions and ideas. If they are to be rewarding, teaching and learning demand both active engagement and mutual respect among all members of the community. Respect is shown by attending class, being on time, paying attention, listening to other points of view, valuing the aspirations and goals of others and recognizing them as individuals, being prepared and contributing to discussions, meeting academic deadlines and performing to the best of one's ability.
5. **Responsibility**
   As an academic community of integrity, Canisius College upholds personal accountability and depends upon action in the face of wrongdoing. Every member of the academic community is responsible for upholding the integrity of the scholarship and research carried out here. Such shared responsibility leads to personal investments in upholding our academic integrity standards. Being responsible means taking action against wrongdoing, discouraging and seeking to prevent misconduct by others. One primary responsibility is to discourage violations of the Code of Academic Integrity by others.

B. Proscriptions

All students of the college are expected to understand the meaning of the Code of Academic Integrity. Ignorance of the code is not a valid reason for committing an act of academic dishonesty. Students should realize that their actions may affect other students. In general, students may not obstruct or interfere with other students' academic work or otherwise undertake an activity with the purpose of creating or obtaining an unfair academic advantage over other students. Each of the following behaviors violates all of the principles of honesty, trust, fairness, respect, and responsibility explained above and is thus prohibited.

1. **Plagiarism — what about copying from the Internet and citing someone else?**
   Plagiarism is using someone else's work without citing the source. Of course, common sense as well as ethics should determine what you document. For example, you rarely need to give sources for familiar proverbs ('You can't judge a book by its cover'), well-known quotations ('We shall overcome'), or common knowledge ('George Washington was the first president of the United States'). But you must indicate the source of any appropriated material that readers might otherwise mistake for your own (5th Edition, pp. 30, 33). Plagiarism may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodicals, websites, speeches, or the writings of other students. Honesty requires that any work or materials taken from another source, for either written or oral use, must be acknowledged. Any student who fails to give credit for ideas or materials obtained from another source is guilty of plagiarism. Plagiarism, in any of its forms, whether intentional or unintentional, violates standards of academic integrity. Examples of plagiarism include, but are not limited to:
   - Direct quotation of any source material whether published or unpublished without giving proper credit through the use of quotation marks, footnotes and other customary means of identifying sources. This includes complete sentences or paragraphs, or an entire piece of written work.
   - Paraphrasing another person's ideas, opinions, or theories from books, articles, websites, etc., without identifying and crediting sources.
   - Borrowing facts, statistics, graphs, diagrams, photographs, or other illustrative or visual materials that are not clearly common knowledge without identifying and crediting sources.
   - Copying another student's essay test answers.
   - Submitting papers written by another person or persons. This includes copying, or allowing another student to copy, a computer file that contains another student's assignment and submitting it, in part or in its entirety, as one's own.
   - Working together on an assignment, sharing the computer files and programs involved, and then submitting individual copies of the assignment as one's own individual work without course instructor approval.
   - Buying or selling, or exchanging term papers, examinations, or other written assignments, or any part of them.
   - Offering false, fabricated, or fictitious sources for papers, reports, or other assignments.
2. **Cheating**

Cheating includes, but is not limited to: using unauthorized notes, study aids, or information on an examination, test, etc.; altering a graded work after it has been returned, then submitting the work for regrading; or allowing another person to do one's work and submitting that work under one's own name. Cheating also includes the possession, without authorization, of copies of tests, answer sheets, or other materials, however obtained, that could interfere with fair, accurate testing, as well as retaining, possessing, using or circulating previously given examination materials without authorization.

3. **Duplicate Submission of the Same Work**
   Submitting the same work for more than one course is a violation unless the professor(s) assigning the work gives consent in advance. This includes work first produced in connection with classes at either Canisius College or other institutions attended by the student.
4. **Collusion**
   Collusion includes cooperation that results in the work or ideas of others being presented as one's own (e.g., rather than as a group effort). However, ordinary consultation of faculty, library staff, tutors or others is legitimate unless the instructor has imposed stricter limits for a particular assignment.
5. **False Information and Lying**
   This includes consciously furnishing false information to other students, faculty members and their representatives, advisors, administrators or representatives of the college offices with the intent to mislead. Instances would include but are not limited to misrepresenting activity outside of the classroom (reports on field work, internships, etc.) or improperly seeking special consideration or privilege (e.g., for postponement of an examination or assignment deadline, etc.).
6. **Falsifying Academic Documentation and Forgery**
   This includes any attempt to forge or alter academic documentation (including transcripts, letters of recommendation, certificates of enrollment or good standing, registration forms, drop/add forms, withdrawal forms, and medical certification of absence) or to falsify other writing in academic matters (e.g., any documentation provided to instructors) concerning oneself or others.
7. **Theft, Abuse, and Destruction of Academic Property**
   This comprises unauthorized removal, retention, mutilation, or destruction of common property of the college that deprives others of equal access to these materials. Such property includes but is not limited to library materials, laboratory materials, computers and computer software, etc. This includes also sequestering library materials for the use of an individual or group; a willful or repeated failure to respond to recall notices from the library; and the removal or attempt to remove library materials from the library without authorization. The theft, mutilation, or destruction of another student's academic work, including books, notes, computer programs, papers, reports, laboratory experiments, etc. also falls under this type of violation.
8. **Unauthorized Use of Information Technologies**
   In the context of the completion of a course and/or assignments (contained within a course), the unauthorized use of computers or the college's computer network (e.g., the unauthorized use of software, access codes, computing accounts, electronic mail, and files) or other electronic devices (calculators, smart phones, iPods/iPads, tablets etc.) is prohibited.
9. **Aiding and Abetting Academic Dishonesty**
   This includes intentionally: (a) providing material, information, or other assistance to another person with knowledge that such aid could be used to commit any of the proscribed acts noted above; or (b) providing false information in connection with any inquiry regarding academic integrity.

· Procedures for Adjudicating Violations of the Code of Academic Integrity

A. Initial Procedure

The course instructor meets with the student to discuss the incident. The student will be informed of the course instructor's suspicions. The student may respond to the allegations and may bring witnesses, if deemed pertinent by the instructor.
The instructor decides whether the student has violated the Code of Academic Integrity and, if necessary, assigns a sanction. This determination of responsibility shall be based upon the facts of the incident and whether it is more likely than not that the student is responsible for the alleged violation(s).
The student shall be provided written notification of the instructor's decision and sanction, normally within five business days. Possible sanctions include:

- Warning: a notice in writing to the student that the student has been found responsible for violating the Code of Academic Integrity;
- Grade Reduction or Course Failure;
- Discretionary Sanctions: work assignments, community service, participation or completion of college service or program, service to the college and/or other related discretionary assignments;
- Educational Program or Project: participation in, or completion of, a program or project specifically designed to help the student understand why the academic integrity violation was inappropriate.

If a sanction is imposed the course instructor is expected to file a "Notification of Academic Dishonesty" form with the appropriate associate dean. Forms are available in all associate dean offices and in other campus offices. The form, the sanction, and supporting documentation become part of the academic misconduct file shared by the associate deans of Arts and Sciences, the School of Education and Human Services, and the Wehle School of Business.
The academic misconduct file is separate from the student's permanent academic file and confidential. First violations of the Code are a part of this confidential record. Second violations are handled on a case-by-case basis and will become part of the student's academic file only in those instances when subsequent offenses are serious enough to warrant inclusion.

B. Appeal

The student may request, in writing, a review of the course instructor's decision by the appropriate associate dean. The written request from the student must be submitted to the associate dean not more than five business days after the student is notified of the course instructor's decision. The associate dean shall review the decision and

meet with the student to discuss the matter. If the student chooses, an advisor of choice may be present during the appeal. The student is responsible for identifying an advisor of choice and notifying the associate dean that an advisor will be present for the appeal. If an appeal is granted, the associate dean may replace the sanction with another that may be more severe, less severe, or otherwise different. The associate dean may impose any sanctions found in Article IV, Section C of the Community Standards except grade change or course failure.

Depending on the individual case, the associate dean may request that the course instructor reconsider the original decision and/or sanction. In very serious cases or when a pattern of academic dishonesty is documented, the associate dean may direct the case to be adjudicated through a Community Standards hearing panel process. If the associate dean is the course instructor or has acted in the course instructor's place, the appeal shall be submitted to the dean of the school in which the course is offered.

C. Hearing Panel

When a case of academic dishonesty is very severe or a documented pattern of violations of the Code of Academic Integrity exists, the associate dean may refer the case to the Dean of Students to be adjudicated through a Community Standards hearing panel. Normally, the associate dean refers the case to the Dean of Students when the violation might merit one of the following sanctions: a notation on the official transcript, probation, suspension, expulsion, or degree revocation. However, the associate dean may choose to hear any case without referring it to the Dean of Students and may then impose any sanctions found in Article IV, Section C of the Community Standards except grade reduction or course failure. Hearing procedures for alleged violations of the Code of Academic Integrity shall operate according to the procedures outlined in Appendix C Hearing Procedures of the Community Standards. However, appeals shall be directed to the Vice President for Academic Affairs.

D. Failure to Appear

The judicial process outlined above is intended to provide the student an opportunity to respond to allegations of violations of the Code of Academic Integrity, thereby enabling the course instructor or associate dean to make an informed decision about responsibility and appropriate sanctions. However, if a student fails to respond to three communications (in the form of written notification, telephone, e-mail, or oral requests) attempting to schedule a meeting, or fails to attend a scheduled meeting, a decision based upon available information may be rendered in absentia.

E. Records

"Notification of Academic Dishonesty" forms and proceedings records shall be maintained confidentially in a central location until five years after the responsible student graduates or permanently separates from Canisius College. In cases where notation on the official transcript, suspension, or expulsion is imposed, the file shall be retained as part of the student's permanent academic record.

A course instructor who suspects academic dishonesty may ask the associate dean about the student's prior record in this area. Anyone other than the course instructor suspecting a violation is expected to inform the course instructor or proctor at the earliest possible opportunity, even while the suspected violation is being committed. In the absence of the course instructor, the associate dean will receive reports of violations and will replace the course instructor in the following procedures. "Associate dean" refers throughout to the associate dean of the school to which the course belongs.

The complete text of the Community Standards judicial policies, procedures, and sanctions can be found in the Canisius College Student Handbook.

Portions of this policy were adapted with permission from the University of Scranton, Loyola College in Maryland, and Georgetown University.

Grades and Policies

Grades inform students of the level of performance they have achieved in a course. Grades are means whereby students may come to know and appreciate their capacities and abilities. Instructors are responsible for specifying the performances required in their courses; students are responsible for meeting the requirements specified.

Grades earned by students at Canisius College reflect:

1. The extent to which the requirements specified in the course syllabus have been met.
2. The degree to which the requirements completed exhibit mastery of the subject or skills which are the object of the course.
3. Other criteria specified by the instructor at the beginning of the course, criteria such as, but not limited to, attendance at lectures or other course functions, projects voluntarily undertaken in excess of specified requirements, correct use of oral or written English and contribution to discussion or other course activities.

Grades earned by undergraduate students include the following:

A	Superior performance.
A-	
B+	
B	Good performance.
B-	
C+	
C	Adequate performance.
C-	
D	Poor, but passing, performance.
F	Failing performance.
FX	Failure due to excessive absences or unauthorized absence from the final examination.
P or **U**	P-Passing. U-Failing. The description of the Pass/Fail program is given later in this chapter.

Grades authorized by the deans include the following:

W	Authorized Withdrawal from a course. The description of withdrawal procedures is in a preceding section of this chapter.

I	Incomplete. A student who has failed to fulfill all requirements of a course may petition the instructor to request an incomplete grade. The request must be approved by the instructor and then the appropriate associate dean. An incomplete grade will be granted for only serious and well-defined reasons.
NG	No grade submitted by the course instructor

Final grades are available on the college's online services page at the conclusion of each semester. If an official grade report is needed for any reason, contact the Student Records and Financial Services Center to request a grade report.

Final course grades cannot, in normal circumstances, be altered after they have been recorded on the student academic record. Should an exceptional reason occur that would justify a late grade change, the faculty member can submit to the appropriate associate dean a request to change a student's recorded grade within the following time frame:

- The end of the spring semester following a course taken in the fall
- The end of the fall semester following a course taken in the summer
- The end of the fall semester following a course taken in the spring

Any request for a grade change after these deadlines must be submitted to the dean of the appropriate college with documentation as to why the grade should be changed.

Students who are disputing a grade received in a course must do so under the guidelines and within the timeframes described under grade grievance procedures.

Students who are dissatisfied with their grade in a course may repeat the course once (exceptions may be approved by the appropriate associate dean in consultation with the department chair). In such cases both grades will be entered in the student's record and will show on the student's transcript, but, for the purpose of computing grade point average, only the higher grade will be used for the GPA calculation. Because retaking courses that have already been passed (any grade of D or above) affects a student's financial aid, students should consult with the Student Records and Financial Services Center and their academic advisor before retaking any courses.

Incomplete Grade

A student who, for serious and well defined reasons, has failed to fulfill all requirements of a course or has failed to take the final exam may petition the course instructor to request from the appropriate associate dean, a grade of "I", indicating "Incomplete Performance."

Only the appropriate associate dean may grant an incomplete grade request. It will not be granted to a student whose only reason is excessive absence during the semester or failure to complete the work of the course before the close of the semester without an exceptionally good reason. Examples of such good reasons might be prolonged illness or hospitalization during the semester, serious illness at the time of the final examination, or other unusual circumstances.

An incomplete grade, when granted, is merely temporary and will automatically be changed to an "FX" grade if a final grade is not submitted by March 1 for the fall, August 1 for the spring and October 1 for the summer.

Pass-Fail Program

Seniors and juniors are eligible to elect one course each semester not to exceed four courses total for which they will receive a grade of either "Pass, P grade" or "Fail, U grade." The purpose of this plan is to enable upperclassmen to take more difficult courses than they would normally take for fear of lowering their grade point average.

The program is as follows:

1. Juniors and seniors who have completed at least 30 hours at Canisius may elect one course each semester, not to exceed a total of four courses in their college careers, for which they will receive a recorded grade on their transcript of either "Pass" or "Fail."
2. This course must be a free elective in the student's degree program.
3. Within one week after the semester begins, the student must file a request for "Pass-Fail" grading. Application forms may be found in the Student Records and Financial Services Center. If the registrar determines that the course meets the requirements to be taken pass-fail, grades will still be assigned for all work done during the course and on the final examination. A final grade will be entered for the student by the instructor. If this grade is "D" or above, the registrar will record a pass (P grade) for the course on the student's transcript; otherwise, he will record a failure (U grade).
4. Having received permission to take a course on the "Pass-Fail" option, a student may request, in the last week of classes and prior to exam week, that they be withdrawn from the pass-fail option and be assigned a conventional letter grade instead. This request is made at the Student Records and Financial Services Center. A student who withdraws from the "Pass-Fail" option receives the letter grade assigned by the instructor.
5. A student attaining a grade of Pass will receive full credit for this course.
6. If a student elects to receive pass or fail in a course, this course will not be counted in the grade point average. The student must carry at least four courses (12 credit hours) to be eligible for this program. Part-time students, however, are eligible with fewer than four courses.
7. This plan is entirely optional. A student may or may not elect to take advantage of it.

Grade Grievance Procedure

Occasions may arise when a student does not agree with the grade he/she has received in a course. When this happens, the question of whether the grade should be reconsidered is addressed in two stages.

I. The initial stage in the grievance procedure is as follows:
   a. The student first contacts the course instructor to discuss the grade in question within four weeks of the start of the semester (regular academic session) immediately following that in which the grade was awarded. If the instructor agrees that the grade in question was inaccurate, a grade change is processed by the instructor.
   b. If the student and the instructor cannot agree on the appropriateness of the grade in question, the student may petition the chair of the instructor's department, in writing, within ten working days after the meeting with the instructor. If a mutually agreeable decision is made through mediation conducted by the chair, the instructor will submit the agreed-upon grade and the process is completed. If there is no outcome that is mutually acceptable to the student and the instructor, the process may

continue. If the instructor is also the chair, then Step 2 is omitted and the process goes to Step 3.

c. The student may appeal the decision to the appropriate associate dean's office within ten working days after the mediation process is complete. The associate dean shall collect written views/and other pertinent material from the involved instructor, student and chair, as well as consult with any other individuals deemed necessary. The associate dean shall render the decision whether the grade should be reconsidered.

d. The decision of the associate dean to reconsider or not to reconsider the grade in question is final. If the decision is to reconsider the grade, the procedure outlined in Part B below is followed. If the decision is not to reconsider the grade, the original grade cannot be changed. Cases which are referred to the procedure in Part B can be withdrawn only with the consent of the student, instructor, department chair, and associate dean after first informing all parties involved.

II. The final stage in the grievance procedure is as follows:

a. If the associate dean feels that the reconsideration of the grade in question is appropriate, a panel of tenured faculty who have not been involved in the process described above is formed from the department in question. The panel must be formed within ten days of the associate dean's decision. If the department does not have a minimum of four members, it will be expanded to include all the tenured members of the departments within the division (Natural Science, Social Science, Humanities, Education, or Business) of which the department in question is a member.

b. A three-member panel will be selected as follows. The associate dean, faculty member and student involved will each select one member of the panel from the designated pool.

c. The panel will review all appropriate material and make a determination about the grade change. This review must be completed within thirty days of the formation of the panel. The panel has the authority to assign a grade for the course in question. That grade may be the same grade as assigned by the instructor or a higher or a lower grade, according to the panel's judgment. The student and the instructor will be informed of the panel's decision and, when applicable, the authorized grade change will be submitted to the registrar.

d. The decision of the panel may be appealed by the original instructor or the student to the vice president for academic affairs only in the following extraordinary circumstances:

i. The grade grievance procedure was not followed.

ii. Prejudice was manifested against either the student or the instructor.

iii. New, relevant information was introduced.
The appeal must be brought within thirty days of the panel's decision. The burden of proof for the appeal rests with the individual bringing the appeal.

e. If the vice president for academic affairs believes that the decision of the panel should be reviewed, a three-member appeal panel will be appointed from the pool of tenured faculty as described in Step B-1. The vice president, the faculty member and the student involved will each select one member. No member of the original panel may serve on the appeal panel. The appeal panel will follow the procedure in Step B-3, including completion of its task within thirty days of the formation of the panel. The decision of the appeal panel is final.

Courses at Other Colleges

Students matriculating at Canisius should plan to complete all their coursework at the college. The rationale for this policy rests in the mission and philosophy of the college and in its concern for the essential unity and integrity of all aspects of the curriculum: the college core, major requirements and free electives. Permission to take courses at other colleges during the regular and summer sessions is granted by the appropriate associate dean, who will consider all aspects of the student's request, including the quality and level of the proposed course and its role in the student's program. Courses intended to fulfill major requirements must also be approved by department chairperson. Permission to take courses at other colleges must be requested on the appropriate form and in advance of taking the course.

Generally, the following guidelines apply:

1. Students are ordinarily limited to one course at another institution for every ten courses taken at Canisius.
2. Junior and senior-level major course requirements are not transferred from community colleges.
3. Courses taken at a four-year college/university will be accepted only if they are offered at a comparable level at Canisius (i.e., freshman-sophomore level/junior-senior level).
4. Students who live outside the greater Buffalo area may receive more lenient consideration in taking a summer course at another college. However, the associate dean may recommend an online web-based course as a preferred option if he/she considers it more appropriate than the off-campus course.
5. Courses used to fulfill Core Curriculum requirements should be taken at Canisius College.

Study Abroad Course Grades

In keeping with the college's policy on "Courses at Other Colleges," students who wish to study at the universities associated with Canisius must study through the Canisius programs. Grades earned in Canisius-affilitated study abroad programs will transfer back to the college and will be counted toward a student's grade point average.

Students who wish to study at other foreign universities or in other countries than those associated with Canisius should confer with the Study Abroad Office. If one of these programs is approved for a student to use as credit toward a Canisius degree, the credit hours will transfer back to Canisius, but the grades will not count toward a student's grade-point average.

Quality Points and GPA

Quality Points

Grades in individual courses result in quality points. Points are assigned based on the table below for each semester-hour completed. Thus the number of credits must be multiplied by the quality points per credit to determine the number of quality points earned. For example, a B in a 3-credit course will earn a student 9 quality points.

Grade A	4.0 points
Grade A–	3.7 points
Grade B+	3.3 points
Grade B	3.0 points
Grade B–	2.7 points
Grade C+	2.3 points

Grade C	2.0 points
Grade C–	1.7 points
Grade D	1.0 point
Grade F (and its equivalent)	0 points

Grade Point Average

The grade point average indicates the student's general scholastic average and is a measure of the quality of his or her work, just as credit hours are the measure of its extent. A student's grade point average is obtained by dividing the total number of grade quality points by the total number of credit hours earned.

Academic Standing

Academic Standing

Academic standing is determined by the cumulative grade point average from the beginning of the student's studies at Canisius.

The following terms are used to describe a student's academic standing:

I. Academic probation: When a student's grade point average falls beneath the level indicated on the next page, he/she is placed on academic probation — a serious warning that the student's academic record at the college is unsatisfactory. It is generally not advisable for students on academic probation to take part in extracurricular activities. Varsity athletes, in addition, are governed by NCAA and regional conference regulations. Probation for two successive semesters will result in automatic academic dismissal from the college.

II. Academic dismissal: Academic dismissal results from any one of the following:
   a. Falling below the grade point average indicated below.
   b. Failing three courses in a single semester.
   c. Being placed on academic probation for two successive semesters. Dismissed students may not enroll in any division of the college and must wait at least six months before applying for readmission.

III. Good academic standing: This is a term used to determine a student's eligibility for financial aid. A student who is on academic probation is generally considered to be in good academic standing. Further details may be found in the section on Financial Aid.

The grade point average levels for academic probation and academic dismissal are given as follows:

Cumulative grade point average, based on 0-30 credits:

ACADEMIC PROBATION	1.50-1.99
ACADEMIC DISMISSAL	Below 1.50

Cumulative grade point average, based on 31 or more credit hours:

ACADEMIC PROBATION	1.75-1.99
ACADEMIC DISMISSAL	Below 1.75

To be eligible for graduation, a student must have earned an overall cumulative grade point average of 2.00.

Separation from the College

Each student's continued registration at the college, the awarding of academic credits and the granting of any certificate or degree are entirely subject to the disciplinary authority of the college. The college reserves the right, therefore, to enforce the regulations concerning satisfactory academic performance and, in consequence, to cancel a student's registration, to refuse academic credits or to deny a certificate or degree. Separation from the college may also be imposed as a penalty for any conduct which conflicts with the ideals of the college or damages its reputation and that of its students.

Academic Forgiveness Policy

This policy is intended to assist former Canisius College students whose grade point average is below 2.0. The Academic Forgiveness Policy is intended to assist students who have reapplied to the college and demonstrate personal growth and motivation to accomplish their educational goals. This policy will allow for up to thirty (30) credit hours of coursework with grades of F or FX to be removed from the calculation of the grade point average. This program may be particularly important to education majors, who must have a grade of "C+" or better in their education courses and have a cumulative grade point average of 2.70 or higher to be eligible to student teach.

A period of not less than five years must have passed prior to the student's readmission to the college. The student must submit a petition for academic forgiveness with the application to the college. The appropriate associate dean will meet with the student, review the petition, and make a recommendation. No acceptance decision will be made without the recommendation of the associate dean, after the review of the petition.

The admissions office will then process the application and notify the student of the decision. Once the associate dean has made a recommendation, a memo will be sent to the Student Records and Financial Services Center indicating that the student has been approved for academic forgiveness and listing the courses affected by the approval. Each affected course will have a grade of "X" listed to indicate the course is part of the academic forgiveness policy and not included in the calculation of the grade point average. The course will remain on the student's academic transcript.

The student must maintain a minimum semester average of 2.50 and a minimum cumulative grade point average of 2.00. The student must meet with the department chair of the intended major. The department chair will review the academic record and make recommendations about what courses from five or more years ago will count toward completion of current major requirements. The student must take a minimum of ten (10) courses at Canisius College to be eligible for a degree. The student will be required to meet with the appropriate associate dean at least twice during the first semester. Progress reports will be required for students during the first semester after academic forgiveness is granted.

An agreement between the associate dean and the student will be completed in writing. The agreement will outline all the requirements for the student to be approved for academic forgiveness. This will also include, but not be limited to, the minimum semester and grade point average requirements, the required appointments for progress review, and course restrictions or limitations for the first semester. Failure of the student to meet the forgiveness agreement will result in automatic dismissal from the college.

Student Records

The Student Records and Financial Services Center maintains the official records for Canisius students. This is the center where students can address issues related to course registration; making official changes including declaring or changing majors, minors, or degree programs; and formally applying for graduation. The center is located on the first floor

of Bagen Hall. The center can also be reached by mail, phone, or email (studentservices@canisius.edu).

Mailing address:
Student Records & Financial Services Center
Canisius College
2001 Main Steet
Buffalo, NY 14208

Phone number:
(716) 888-2600
(800) 238-8160

- Course Registration (p. 71)
- Declaring Majors and Minors (p. 72)
- Making Changes (p. 73)
- Leaves and Withdrawal (p. 73)
- Graduation (p. 74)
- Policy on Student Records (p. 74)

Course Registration

The college year consists of two regular semesters, fall and spring, plus several summer sessions of varying lengths. Several programs offer courses in the fall and spring semester that last only a portion of the semester.

The unit of instruction is the semester hour or credit hour, which consists of the equivalent of one lecture period of 50 minutes (hereafter called a contact-hour) each week for the entire semester (approximately 15 weeks). In addition to the time in class, students are expected to complete approximately twice as much time outside of class working on the course and its materials.

1. The general expectation for one credit hour is one contact-hour of classroom or direct faculty instruction and a minimum of two hours of student work completed outside of the classroom each week for approximately fifteen weeks for a traditional semester, or the equivalent amount of work over a different period of time; or
2. For other academic activities (including laboratory work and other academic work leading to the award of credit hours), an amount of work at least equivalent to that required in the above definition, as determined by the College.

In practice, a credit hour or semester hour consists of a minimum of 750 minutes of class time during a semester.

A course having three 50-minute class periods a week will, therefore, earn three semester hours of credit. Other meeting patterns will also fulfill the required contact time. *The number of semester credits to be earned in a given course is always indicated in the course description.*

Course Offerings

The information listed in this catalog about course availability and when courses will be offered was provided by chairs and program directors based on their planned course offerings and are intended to provide students with guidance as they produce their schedules. However, schedules are subject to change, especially when the availability of appropriate instructors changes. Actual course offerings are listed in the online course schedule produced each semester by the Student Records and Financial Services Center.

Summer Session

The Canisius College Summer Session affords qualified graduate and undergraduate students educational opportunities of the same quality as the courses offered during the regular fall and spring semesters. Course offerings are planned especially for the following groups:

- Undergraduate students who wish to complete required courses, acquire additional credits toward a degree, or make up deficiencies.
- Transient students, graduate and undergraduate, who are pursuing degree work at other colleges and universities.

Course Registration Restrictions

In some departments registration in all or in some the course offerings may be restricted to majors in that department. In some instances the department chairperson may authorize registration of non-majors in the course offerings.

Prerequisites

Some courses have prerequisites that must be met before a student can register for the course. Prerequisites include such requirements as the successful completion of previous courses, concurrent registration in another course, permission of the instructor or chair, and specific GPA and course grade requirements. A student may not register for a course where prerequisites are indicated unless the prerequisites have been successfully completed.

Note: For two-semester courses that are listed with one title and description (e.g., BIO 111-BIO 112), it is understood that successful completion of the first semester is a prerequisite for admission to the second half of the course.

The numerical sequence used at Canisius College indicates the following: Courses numbered 100-199 and 200-299 are usually freshman/sophomore courses; 300-399 and 400-499 are usually junior/senior courses. Courses numbered 500 or higher are graduate courses.

Only students with senior standing (students having completed 90 or more credit hours) and a minimum GPA of 3.0 may petition to take one graduate course per semester. Students must obtain approval from the chair or program director of the program offering the graduate class and the chair or program director of their undergraduate major, prior to petitioning to enroll in a graduate course. Undergraduate students may only take a total of two graduate courses as undergraduates and are generally limited to courses numbered 500-599. This policy does not apply to undergraduates who are currently pursuing college-approved undergraduate and graduate curricula, who should follow the curriculum map of their program(s). In exceptional cases, students may petition to take courses at the 600-level or higher, using the same procedures. Any graduate courses taken under this policy will appear on a student's undergraduate transcript and the grades earned will factor into the student's undergraduate grade point average.

The college reserves the right to cancel a course because of inadequate registration or for reasons that cannot be foreseen. Because of the brevity of course descriptions, further information concerning the content of each course should be obtained from the individual department.

Substitutions

All degree requirements must be satisfied as stated in the catalog. In some circumstances it may be necessary to make adjustments to the student's curriculum. Substitutions must be approved in writing by the appropriate

person: the associate dean for the Core Curriculum and the department chairperson for the major and/or concentration requirements.

Immunization Requirements for Class Attendance

Measles, Mumps, Rubella

New York State law requires all students taking six or more credits, attending any classes on campus, and born on or after January 1, 1957 to provide proof of immunity against measles, mumps and rubella to the Student Health Center prior to class attendance. Students must submit proof of two doses of measles (rubeola) vaccine, one dose of rubella (German measles) vaccine and one dose of mumps vaccine, given on or after their first birthday and after 1967.

Meningitis Requirement

All students registered for 6 or more credits and attending class on campus, regardless of birth date, are required to receive information about the risk of meningococcal disease and the benefit of vaccination. Students are required to read the information and either obtain the meningitis vaccine or sign a vaccine refusal statement within thirty days of first class attendance.

Submission Dates and Non-Compliance

Immunization records, must be submitted by July 31 for fall attendance and January 1 for spring attendance. Summer students must submit records before their first day of class. Non-compliance with health requirements results in registration withdrawal, removal from college housing, and inability to register with the college for future semesters. If registration is withdrawn, a student will be reinstated once the health forms are submitted and deemed complete. Canisius College charges an immunization reinstatement fee. To view the fee click here https://www.canisius.edu/tuition-aid/student-records-and-financial-services/cost-attendance (https://www.canisius.edu/tuition-aid/student-records-and-financial-services/cost-attendance/). Compliance with New York State health requirements is strictly enforced across the campus.

Students taking online courses only are generally exempt from these requirements, however some online programs have established stricter immunization requirements. On line students should discuss health requirements with Admissions or their program directors.

The Student Health Center website (https://www.canisius.edu/student-experience/student-support-services/student-health/) has detailed information about health requirements and links to the required forms.

Cross-Registration Program

This program is sponsored by the Western New York Consortium of Colleges. Participating colleges/universities include Alfred State College, SUNY Buffalo, Canisius College, Daemen College, D'Youville College, Empire State College, Erie Community College, SUNY Fredonia, Genesee Community College, Jamestown Community College, Medaille College, Niagara County Community College, Niagara University, St. Bonaventure University, Trocaire College, University at Buffalo and Villa Maria College.

Cross-registration enables Canisius students to enrich their programs of study by taking specialized undergraduate courses available only at other campuses, and it provides some flexibility for meeting graduation requirements in a timely manner. During the fall and spring semesters only, full-time undergraduate students are eligible to participate in this program. Students must maintain a full time course load (12 credits minimum) at Canisius during the semester in which they cross-register. Students must abide by the rules and regulations of the institution where they are cross-registered.

Students may cross-register for only one undergraduate course per semester. Students may not cross-register for independent study or tutorial courses. Course registration is on a space-available basis only. At the end of the semester, the grade will be forwarded to Canisius by the visiting institution. The grade received will count in the Canisius grade point average. Course loads above 18 credit hours including the cross-registration course will result in additional Canisius tuition charges.

Students may only cross-register for a course that is approved. A major course must be approved by the student's major department chairperson. A core curriculum course must be approved by the appropriate associate dean. A free elective course can be approved by the cross-registration officer. Students should check with the visiting school for course-registration restrictions, for additional requirements such as proof of residency and dates and times when cross-registration will be permitted. Cross-registration during your final semester at Canisius is discouraged since this may delay your degree conferral.

The cross-registration forms are available in the Student Records and Financial Services Center located in Bagen Hall 106.

Declaring Majors and Minors

Declaring a Major

A student declares a major upon entrance to the college by filling out the "Academic Interest" section on the admission application. If students wish to change their majors, they must complete a Change of Major form in the Student Records and Financial Services Center. It is the student's responsibly to make sure the record reflects their correct major, concentration or minor data.

It is extremely important that students declare the correct major, because academic advisors are assigned based on the major on file with the Student Records and Financial Services Center.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors

Minors are another option available to students to explore an area of interest. Minors generally have fewer requirements than a major - usually 5 to 7 courses. Some minors are open to all students, while others may be restricted to students in specific majors. The requirements for each minor are outlined in the appropriate departmental sections, and college

policy requires that all minors require at least 9 credits that are distinct from any other earned majors or minors. The complete list of minors (http://catalog.canisius.edu/undergraduate/minors/) provides links to each minor page. To declare a minor, students must complete the appropriate minor request form that must be signed by the department chair and the appropriate associate dean.

Making Changes

Change in Registration

Prior to and during the first five days of the fall and spring semesters a student is allowed to drop and add classes. However, once registration has been completed, the student must follow the program of studies shown on the official registration form. See the academic calendar for dates each semester.

Change in Major

A change of major form is available in the Student Records and Financial Services Center and on *myCanisius*. The form should be completed by the student and returned to the Center. This will insure that the student's information is available to the correct academic departments.

Change in Name, Address, and Phone

It is the responsibility of each student to notify the college of any change of name, address, and/or phone number. Change-of-address forms are available in the Student Records and Financial Services Center and on *myCanisius*.

Withdrawal from a Course

The form is available in the Student Records and Financial Services Center and in the Griff Center for Academic Engagement. A student wishing to withdraw from a course must submit a course withdrawal form to the Student Records and Financial Services Center after obtaining the signatures as required on the form.

The instructor indicates either approval or disapproval of the student's request to withdraw. An instructor might disapprove withdrawal if there is evidence of academic dishonesty. In cases where the instructor disapproves of the withdrawal, permission to withdraw is determined by the associate dean of the student's school in consultation with the instructor of the course. Requests for withdrawal are not granted automatically, nor are they denied automatically.

The deadline for withdrawal without academic penalty is the end of the 12th week of classes of each fall and spring semester. See the academic calendar for specific dates, including summer sessions. Withdrawal from a course results in a grade of "W" (withdrawal) for the course. Failure to submit the withdrawal form results in a grade of "FX" (failure due to excessive absence). A grade of D will be entered for graduate courses.

Ordinarily, no student will be allowed to withdraw from any course after the deadline. However, in extreme circumstances, a student may request a late withdrawal with the assistant or associate dean of his/her school (or designee). Late withdrawals are intended to accommodate only circumstances that are deemed to be beyond the student's control. Students requesting a late withdrawal submit a written statement with supporting documentation to their assistant or associate dean (or designee) who will confer with the course instructor. The decision of the assistant or associate dean (or designee) is final. Withdrawals will not be granted during final exam week.

Leaves and Withdrawal

Withdrawal from the College

A student desiring to withdraw from the college must consult with a designated member of the Griff Center for Academic Engagement who will forward the withdrawal form to the appropriate associate dean. In the case of freshmen, a parent or guardian must indicate approval of withdrawal by signing the withdrawal form. The official date of the student's withdrawal is the date on which the withdrawal form is received and approved by the appropriate associate dean. A student withdrawing from the college at any time during a semester without proper authorization fails all of his/her courses for that semester.

A student who does not register for two or more semesters and returns to the college is required to follow the catalog requirements at the time they return to the college.

Medical Leave of Absence

Students may request a leave of absence from Canisius College when a medical condition significantly interferes with their ability to function at the college. This policy is intended to assist students with an absence of one to two semesters. It is not intended to allow a long period of absence during a single semester. A student taking a leave of absence for medical reasons will not be eligible to complete courses within the semester for which the medical leave of absence is approved.

Students must submit a written request for a medical leave of absence with the Griff Center for Academic Engagement (OM 013). For a leave of absence to be considered, a student must provide written verification from a licensed health/mental health professional of the presence and/or severity of a medical condition. Questions or concerns should be directed to the Griff Center for Academic Engagement.

A student granted a leave of absence will be expected to return to Canisius College after the leave has ended. Failure to return from a leave of absence after two semesters results in a formal academic withdrawal from Canisius College. A registration hold will be placed on the student's account during a leave of absence.

To return from a leave of absence, the student must provide the Griff Center for Academic Engagement with an appropriate written statement from a licensed health/mental health professional that confirms the student sought and received treatment and is capable of meeting the challenges of academic life. When appropriate, this statement should also include recommendations for continued treatment once the student returns to the college and any needed academic restrictions or accommodations. It is expected that a request to return should be made at least 30 days in advance of the commencement of the new semester. The Griff Center for Academic Engagement will determine the conditions a student will need to meet in order to return after reviewing the statement with appropriate personnel.

Voluntary Leave of Absence

A student who wishes to take a semester or two off, but plans to return to the college within one calendar year, may elect to take a leave of absence. A student who has been on leave for more than one year and/or attended another institution while on leave will be required to re-apply for admission to the college.

Involuntary Leave of Absence

When a student's behavior is disruptive to the college community or when a student's behavior presents a danger to themselves or others, the senior associate dean of students or their designee may place the student on an involuntary leave of absence in accordance with the College's Students of Concerns Policy. A student's return from an involuntary leave is dependent upon the resolution of the circumstances leading to that leave and must be coordinated with the senior associate dean of students or their designee.

Graduation

Degrees are awarded three times a year: August 31 for students completing their degree requirements during the summer; February 1 for students completing their requirements during the fall semester, and at the annual May commencement ceremony on the date designated in the college academic calendar. Students who anticipate completing degree requirements the following May, August or September should submit an "Application for Graduation through the commencement community page on *myCanisius* by the deadlines below:

If your requirements will be completed:	Application for Graduation due by:	Your diploma will be available:
In May	December 15	At May Commencement
In August	August 1	Approximately August 31
In December	December 2	Approximately February 1

To qualify for the degree of bachelor of arts or bachelor of science, a candidate must complete a minimum of 120 credit hours, the core curriculum requirements and all requirements of the major. To qualify for the degree of associate of arts, a candidate must complete satisfactorily 20 three- or four-credit hour courses and a minimum of 60 credit hours.

Satisfactory completion of requirements means that the candidate has maintained the grade point average indicated in the section on Academic Standing and has completed all general and departmental requirements as outlined in this catalog.

In extraordinary circumstances a student may petition the Student Records and Financial Services Center to be allowed to participate in graduation ceremonies even though the student will not have completed all degree requirements by the date of commencement. Before graduation, the degree candidate must settle all accounts with the Center.

A student who completes the degree requirements in August or December and wishes to obtain his/her diploma before the next commencement should call or visit the Student Records and Financial Services Center after August 31 or February 1. Each student's name should be submitted to the Center office exactly as the student wishes it to appear on all official documents of the college.

It is the student's responsibility to keep this file accurate. A fee of $30.00 will be assessed to reprint a diploma if the name on the new diploma differs from that on the official record of the college.

Graduation Honors

Only students who have completed the last 60 credit hours of academic work at Canisius College are eligible for graduating with honors. The Canisius College cumulative grade point average (truncated at two decimal points) determines graduation with honors according to the following scale:

- Degree is awarded summa cum laude to those whose average is 3.80 or higher.
- Degree is awarded magna cum laude to those whose average is 3.65 or higher.
- Degree is awarded cum laude to those whose average is 3.45 or higher.

Policy on Student Records

The Family Educational Rights and Privacy Act of 1974 (FERPA; Section 438 of the General Education Provisions Act) as amended is the federal law governing individuals' access to student records. The guiding principle of FERPA is that education records are private and that students have the right to limit their disclosure to third parties. FERPA grants students the right to inspect and review their education records, the right to request to amend their education records and the right to limit disclosure of some personally identifiable information known as directory information. In compliance with FERPA, the following constitutes the college's policy instructing students of the procedures available to provide appropriate access to personal records while protecting the confidentiality of these records.

For purposes of FERPA, "education records" are all records which contain information directly related to a student and maintained by Canisius College. Records that are not "education records" include but are not limited to sole possession, law enforcement, employment, medical and counseling, and post-attendance records. Please note that this policy does not apply to student records and files retained by individual faculty/staff members which are not accessible to any other person except a substitute designated by the faculty/staff member. A "student" is defined as one who has attended or is attending Canisius College and regarding whom Canisius College maintains education records.

All students have records in the student records office, but additionally, students may also have records in the following places:

- Dean and/or Associate Deans of the College of Arts and Sciences, the Wehle School of Business, and the School of Education and Human Services
- Center for Professional Development
- Office of Student Affairs
- Student Health Center
- Office of Residence Life
- Departmental offices

Normally, education records will not be released — nor access given — to third parties without written consent of the student unless the party meets one of the following:

- To school officials (faculty and staff) who have a legitimate educational interest in the records. The determination of those who have "a legitimate need to know" will be made by the person responsible for the maintenance of the record. This determination must be made scrupulously and with respect for the individual whose record is involved.
- To federal, state and local officials involving an audit or evaluation of compliance with educational programs.
- To anyone who is providing financial aid to the student ("financial aid" does not include any payments made by parents).
- To organizations conducting certain studies for or on behalf of the college.
- To accrediting organizations to carry out their functions.
- To comply with a judicial order or a lawfully issued subpoena.

- To parents of a dependent student.
- To appropriate parties in a health or safety emergency.
- To schools in which a student seeks or intends to enroll.
- To an alleged victim of a crime of violence of the results of a disciplinary hearing regarding the alleged perpetrator of that crime with respect to that crime.
- To parents/legal guardian when their children (under age 21) are found to have violated the Canisius College alcohol or drug policy.
- To military recruiters who request "Student Recruiting Information" for recruiting purpose only.
- To the Internal Revenue Service (IRS) for purposes of complying with the Taxpayer Relief Act of 1997.
- To the Bureau of Citizenship and Immigration Services (BCIS) for purposes of the Student and Exchange Visitor Program.
- To authorized representatives of the Department of Veterans Affairs for students receiving educational assistance from the agency.

It should be noted that FERPA permits the disclosure of education records to the parents of a dependent student. The college, however, considers its students to be adult decision-makers; as such, students have the right and responsibility to share information about their grades and degree pursuit with their parents and/or guardians. This means that the staff of the college normally will not give out information about grades or degree pursuit and will instead suggest that parents or guardians have conversations directly with students about these matters. The college's policy provides a greater degree of privacy for dependent students than FERPA would require. If the student agrees to have this information released to the parents, the student must sign an Authorization to Disclose Grades form with the Student Records and Financial Services Center, Bagen 106. A student may authorize the release of specified records to other specific individuals. A notification of releases made to third parties must be kept in the student's record. This notification is open only to the student and the person in charge of the record. The third party must be informed that no release of personally identifiable data is authorized without the written consent of the student.

A notification of releases made to third parties shall be kept in the student's record (unless forbidden by a judicial order or subpoena). The third party shall be informed that no release of personally identifiable data is authorized without the written consent of the student.

The college has established the following procedures enabling students to have access to their records:

1. The student may see his or her record by filling out a request form at the office where the record of interest is maintained. Students may not inspect and review the following:
   - Financial information submitted by parents.
   - Confidential letters and recommendations placed in their files prior to January 1, 1975.
   - Confidential letters and statements of recommendation placed in records after January 1, 1975, to which the student has waived his or her right to inspect and review.
   - Education records containing information about more than one student; however, in such cases, students will be given access to the part of the record which pertains only to the inquiring student.
   - Employment records kept in the normal course of business which relate exclusively to students as employees.
   - Medical records kept in the Student Health Center. This office rigidly protects the confidentiality of those records but they can be reviewed by a physician or appropriate professional of the student-patient's choice.
2. Access is to be granted promptly and no later than 30 days from the date of the request.
3. The student may obtain copies of documents to which he or she is entitled, by requesting the documents in writing. The college may charge for these copies.
4. The student may request and receive interpretation of his or her record from the person (or designee) responsible for maintaining the record.

Students have the right to challenge the content of their education records if they consider the information contained therein to be inaccurate, misleading or inappropriate. The process includes an opportunity for amendment of the records or insertion of written explanations by the student into such records. The procedures for challenging records can be found in the Office of Student Affairs Old Main 102.

Unlike education records, directory information shall be released freely unless the student files the appropriate form requesting that certain information may not be released. This form is available at the Student Records and Financial Services Center, Bagen 106. Directory information includes but is not limited to name, address, e-mail address, phone number, photograph, date and place of birth, major field of study, dates of attendance, grade level, enrollment status, participation in officially recognized activities and sports, weight and height of members of athletic teams, degrees, honors and awards, received and most recent education agency or institution attended.

This policy does not preclude the destruction of any record the college does not consider germane. Persons in charge of records shall ensure that only pertinent items are retained in student files. The forms for "Request for Confidential Status of Directory Information" and "Authorization to Disclose Grades" shall be removed from a student's educational records upon graduation unless the student makes a specific request that these forms remain.

Advisement

Students come with diverse needs and varied backgrounds. Canisius College believes that this diversity calls for individualized assistance as students develop into self-directed, independent learners. Thus the college provides a variety of resources to help students tailor their advisement and support to their individual needs. Major advisement is embedded within the academic programs, and each student is assigned a major advisor within the academic department. In addition, the Griff Center for Academic Engagement provides students with comprehensive programs, services, and resources to support student academic and career success and a transformative learning experience grounded in our Catholic, Jesuit mission. The Griff Center is a hub for academic support and career advising and has professional staff ready to assist students in their academic and professional development. The goal of the Center is to provide students with the academic support and assistance they need to become successful lifelong learners. The professional staff in the Griff Center helps students recognize their academic strengths and weaknesses, establish educational goals and career plans, and identify the appropriate majors, courses, and resources that are necessary to achieve their academic success.

Freshman Placement

First-Year Writing Placement

The First-Year Writing Program in conjunction with the Griff Center screens incoming freshmen for appropriate placement in writing courses (ENG 111

or ENG 100). High school average, SAT, ACT, and high school English and Social Studies Regents scores are used to determine placement.

Mathematics Placement

The Department of Mathematics and Statistics, in conjunction with the Griff Center, screens incoming freshmen for appropriate placement in mathematics. High school average, SAT, ACT, and high school mathematics scores are used to determine the placement.

Advising Within the Major

Freshmen who have declared a major will be assigned an academic advisor within the major. These major advisors will help students with course selection each semester to help students remain on track to complete their degree. Students must meet with their major advisor each semester to receive their PIN for course registration. Additionally, students should consult with their advisor if they change their registration to ensure the change does not affect their progress toward graduation.

Undecided Students

Students who are still deciding on a major will receive academic advisement and career services from the Griff Center until they declare a major.

Part-Time Students

Part-time students are required to meet with an advisor, and are encouraged to use the services of the Griff Center in selecting proper courses and understanding the resources that are available to assist them at the college.

Non-Matriculated Students

Non-matriculated students are registered through the Student Records and Financial Services Center. Those who are interested in matriculating at Canisius are welcome to meet with an advisor in the Griff Center.

Griff Center for Academic Engagement

The Griff Center for Academic Engagement (https://www.canisius.edu/student-experience/student-support-services/griff-center/) represents a collaboration between the Office of Academic Affairs and the Office of Student Affairs that provides comprehensive programs, services, and resources to support student academic and career success and a transformative learning experience grounded in our Catholic, Jesuit mission. The Griff Center assists students in their academic and professional development and provides them with the support and assistance they need to become successful lifelong learners.

Strengths

The Griff Center uses StrengthsFinder to assist students in identifying and optimizing their strengths and applying them to all aspects of their lives. StrengthsFinder is used by hundreds of colleges and universities throughout the United States and it has been determined that students who are aware of their strengths are more likely to stay in college, earn higher GPA's, and find success securing internships and jobs.

A student's Strengths experience begins by taking the StrengthsFinder online assessment, which takes 20-30 minutes to complete. The top 5 talent themes are identified and this is the first step towards developing natural talents into strengths. The Griff Center helps guide students through the different themes, helps the student develop ways to incorporate their strengths into their daily life, and build upon them as they explore academic and career goals. Stop by the Griff Center to make an appointment to learn more about this great opportunity.

Undecided Majors

The Griff Center for Academic Engagement provides advisement for students who are still deciding on a major. By working collaboratively with the team of professionals within the Griff Center, students have exposure to career development tools and academic major exploration. The Griff Center provides comprehensive advisement that empowers students to take responsibility for their educational, career, and personal goals. Additionally, the Griff Center team is dedicated to creating a supportive and friendly atmosphere where students feel comfortable seeking assistance.

Tutoring Services (OM 315)

Tutoring services are available for all Canisius students and provide a variety of opportunities for them to achieve their own academic success. Group tutoring sessions allow students to receive academic assistance from peer and adjunct professor tutors. Tutors are available in the majority of academic disciplines and employ various academic strategies to help address individual student needs.

Study Zone (OM 318)

Open to all Canisius students, Study Zone provides students with an opportunity to focus on academic work in a quiet environment conveniently located near Tutoring Services where additional assistance may be sought.

Academic Mentor Program (OM 317)

This program presents students with an opportunity to meet one-on-one with an academic mentor on a regular basis to assist with better time management, prioritization of responsibilities, study skills, and assistance needed to achieve academic success.

Accessibility Support (OM 317)

Committed to creating equal access for all Canisius students with disabilities, Accessibility Support helps meet individual needs and oversees the administration of reasonable accommodations and proctoring exams. Academic and non-academic accommodations are determined on a case-by-case/course-by-course basis after review of a student's official documentation.

Proctor Site (OM 317)

The Proctor Site assists in proctoring make-up exams for the campus community. Students must determine the feasibility of a make-up exam with their professor prior to making arrangements with the proctor site.

Veterans Support (OM 320)

The Griff Center provides an environment that helps student-veterans achieve their academic and personal goals. Our staff is committed to creating a supportive and friendly atmosphere where students feel comfortable seeking assistance concerning both academic and non-academic issues. In addition, there is a lounge designated for student-veterans where they may study and relax between classes.

Career Planning and Services: EXPLORE – EXPERIENCE – ENGAGE (OM 013)

The Griff Center is here to help students and alumni develop career plans and gain the professional skills needed in today's competitive job market.

Career development begins on day one at Canisius! The Griff Center has developed a three-point career action plan designed to help students and alumni:

EXPLORE • Learn about their strengths and interests and how they relate to majors and careers
EXPERIENCE • Gain experience through internships, service, and research
ENGAGE • Network with alumni and employers to launch their career

The Griff Center provides personalized, services and programs to meet the complete career development needs of Canisius students and alumni. The Griff Center offers: Career coaching; Assistance with locating internship and job opportunities; Resume and cover letter review; Video mock interviews; On-Campus Interviews with local and national organizations; On-and Off-Campus recruiting events and professional development opportunities as well as engage in career programs and events.

Handshake

The Griff Center is excited to provide students and alumni with free access to Handshake, a exclusive platform for Canisius students and alumni to search for full-time, part-time, volunteer, and internship opportunities as well as engage in career programs and events. Handshake also has online resources for students' professional development.

Honors and Awards

Recognition of Academic Excellence

Canisius College offers a number of opportunities to celebrate student academic success. These include:

Dean's List and Merit List (p. 77) recognition each semester based on a student's grades in that semester.

Honor society membership (p. 77) for students who meet the qualifications.

College-wide awards (p. 78) that are given to students regardless of their major (generally given at the Honors Convocation at the end of a student's senior year).

Departmental awards and honors (p. 78) (generally given at the Honors Convocation at the end of a student's senior year).

Graduation Honors (described at the end of the section on graduation (p. 74) in this catalog).

Dean's and Merit Lists

Two categories of recognition are awarded at the end of each semester. The first recognizes full-time students and the second recognizes both full-time and part-time students. In addition, students in either category who achieve a 4.00 will receive the designation “with Special Distinction.”

Dean’s List

Awarded to students who have attained a grade point average of at least 3.50 for the semester and have completed at least four courses of three credits or equivalent.

Merit List

Awarded to students who have attained a grade point average of at least 3.25 for the semester and have completed two courses of three credit hours or equivalent.

Students who receive an “Incomplete” grade will be eligible for the Dean’s or Merit lists once the work is completed and a passing grade submitted. The “Incomplete” grade must be changed within six weeks from the end of final examinations deadline.

Honor Societies

Canisius College has chapters of a number of national and international honor societies. These societies have established specific academic requirements for students who wish to join the society, and most also have additional requirements that may include service, participation, recommendations, or academic standing guidelines.

Honor Societies Open to Students in Any Major

Alpha Sigma Nu is the honor society of Jesuit institutions of higher education, including all 28 Jesuit colleges and universities in the United States, Regis College of the University of Toronto, Campion College in Regina, Saskatchewan, and Sogang University in Seoul, South Korea. Juniors, seniors, and students in graduate and professional schools who rank in the top 15 percent of their classes may be considered for membership. The college’s chapter may nominate no more than four percent of the junior and senior classes for membership. In addition to scholarship, loyalty to the college and the Jesuit ideals of higher education, and service to the college and larger community are the criteria for admission.

Chi Alpha Sigma is the national college athlete honor society.

Di Gamma is the Canisius Honor Society that recognizes those who have rendered outstanding service to Canisius College.

Major-Specific Honor Societies

Alpha Kappa Delta is an international sociology honor society. It promotes human welfare through the association of a fellowship group interested in developing scientific knowledge that may be applied to the solution of social problems.

Alpha Phi Sigma is the national criminal justice honor society

Beta Beta Beta is the national honor society for students majoring in the biological sciences. Students must demonstrate academic achievement as well as be involved in service, scholarship, and social activities to be inducted as a national member.

Beta Gamma Sigma is the premier honor society recognizing business excellence, and only recognizes students in AACSB accredited programs. The Wehle School of Business established its chapter of Beta Gamma Sigma (https://www.betagammasigma.org/) in 1978. Lifetime members of the Society have earned the right to be considered the "Best in Business." Students who graduate in the top 20 percent of their class are eligible for membership.

Eta Sigma Phi is the honorary society for classical studies

Iota Tau Alpha is the athletic training education honor society

Kappa Delta Pi is the international honor society in education

Lambda Pi Eta recognizes, fosters and rewards outstanding scholastic achievement in communication studies. Lambda Pi Eta’s ideal is to stimulate

interest, promote and encourage professional development, and to provide an opportunity to discuss and exchange ideas in the field of communication. This society is the national communication association's honor society.

Phi Alpha Theta is the national history honor society. The local chapter's events include speakers, lectures, an annual induction ceremony and participation in a convention. Prospective members must have taken a minimum of four history courses with a 3.25 GPA and a minimum 3.06 QPA.

Phi Sigma Tau serves as a means of awarding distinction to students who have high scholarship and personal interest in philosophy, as well as popularizing interest in philosophy among the general collegiate population.

Pi Delta Phi is the national French honor society

Psi Chi is an international honor society in psychology and recognizes students at both the undergraduate and graduate level.

Sigma Delta Pi is the national collegiate Hispanic honor society. Membership is available to students who attain excellence in the study of the Spanish language and who have made contributions to the Latino/a culture.

Sigma Tau Delta is an international English honor society that honors undergraduates, graduate students, and scholars in academia, as well as upon professional writers who have recognized accomplishments in linguistic or literary realms of the English language. Members have the opportunity to formulate ethical principles, develop skills in creative and critical writing, and foster a spirit of fellowship.

College-Wide Awards and Prizes

The **Rev. Francis A. O'Malley, SJ, Memorial Award** is awarded to the member(s) of the graduating class who has achieved the highest cumulative average among students who have completed four years of study at Canisius College. This award is based on eight semesters of completed work.

The **Rev. James M. Demske, SJ, Scholastic Achievement Award** is bestowed upon a senior(s) who has transferred to Canisius College and has completed at least 60 credit hours at Canisius. This student will have achieved an exceptionally high cumulative average while a student at Canisius. This award is based on all semesters of completed work at Canisius.

The **Alumni Association Distinguished Senior Award** is awarded to a senior(s) who has distinguished him/herself through leadership roles and service to the college.

The **ALANA Achievement Award** is bestowed on a senior who is African American, Latino/a American, Asian American, or Native American who exemplifies the Jesuit value of *Magis* through academic excellence, exceptional leadership, and service to Canisius and/or the community at large.

The **Campus Ministry Award** is given to a graduating senior with a strong academic record who has contributed to the Canisius College community through participation in the events and programs of Campus Ministry and who has taken a leadership role in faith and justice activities.

The **Dr. Martin Luther King, Jr. Awards** are given to faculty members, students, or administrators whose lives and work best represent the ideals of Dr. King.

All-College Honors Program

The **Amy Betros Community Service Award** is awarded to a graduating All-College Honors student who best exemplifies the Jesuit spirit of "men & women for and with others." This award for community service is named for Amy Betros who co-founded and co-directs St. Luke's Mission of Mercy on the East Side of Buffalo, an organization that provides food, clothing, shelter, and tutoring for those in need.

The **Robert J. Butler Award for Leadership** recognizes students who have exercised strong leadership in carrying out co-curricular and extra-curricular activities for the All-College Honors Program, and who have taken leadership roles in honors classes.

The **Kristin M. Brady Award for Excellence in All-College Honors Thesis** is awarded to a senior who has written the most outstanding thesis in the All-College Honors Program.

The **John J. Hurley Award for Academic Excellence, Leadership and Social Justice** is awarded to the All-College Honors student graduating in the spring semester who best exemplifies the Jesuit values of academic excellence, leadership, and the promotion of justice. The award is named for the Canisius College president who was an outstanding All-College Honors student (Class of 1978) at Canisius and, since then, has exemplified the spirit of *magis* as a community leader, generous benefactor, and a tireless advocate of social justice.

Raichle Pre-Law Center

The **Albert R. Mugel Award** is presented annually by the Raichle Pre-Law Center. It is given to a senior intending to pursue a career in law and whose achievements, individual character, and dedication to the welfare of the community best exemplify the career and ideals of Albert R. Mugel. Mr. Mugel was a member of the college's Board of Trustees and worked tirelessly to enhance the Pre-Law Center and enhance its position in Western New York.

Urban Leadership Learning Community

The **Lenore "Lee" Rosica Award for Outstanding Leadership and Service** is presented to the Urban Leadership Learning Community senior who has demonstrated outstanding leadership and service both at the college and in the wider community.

The **Sebastian J. "Red" Rosica Award for Excellence in Academic Achievement** is presented to the Urban Leadership Learning Community senior who has earned the highest GPA in their undergraduate career.

Women & Gender Studies Program

The I. Joan Lorch Award for Women's Studies is awarded to a student who has made a significant contribution to promote women's issues on the Canisius College campus through such activities as writing a newspaper series, performing committee work, or representing women's issues on a governing body.

Departmental Awards

College of Arts & Sciences Departmental/Program Awards

Animal Behavior, Ecology, and Conservation (ABEC) Program

ABEC Academic Achievement Award is awarded to the student who holds the highest GPA in the ABEC major.

ABEC Animal Consciousness Award recognizes an ABEC student who, in the determination of the faculty, has demonstrated significant personal and professional growth during his or her time at Canisius.

ABEC Excellence in Research Award recognizes a student whose outstanding scientific research helps to advance the understanding of animals.

ABEC Exemplar Award recognizes the graduating senior in the ABEC program who embodies the Canisius College ideal: excellence in the classroom, outstanding scholarship, and a dedication to making the world a better place by advancing the fields of animal welfare and wildlife conservation.

ABEC Service Award recognizes the outstanding community services of a graduating animal behavior major.

Bioinformatics Program

Student General Excellence Award in Bioinformatics honors the bioinformatics major who, along with a high GPA, has also made contributions to the field through research and/or service activities.

Bioinformatics Program Excellence in Research Award honors a bioinformatics student who has completed significant research at the undergraduate level.

Biology Department

Alexander Award for Outstanding Research in Biology is given by the Alpha Theta Chapter of Tri Beta, the National Biological Honor Society, to a graduating biology major who has completed a significant independent research project leading to presentation or publication in scientific literature.

Alpha Theta Chapter of Tri Beta Fialkiewicz Award for Academic Excellence in Biology is given by the Alpha Theta Chapter of Tri Beta, the National Biological Honor Society, to the graduating biology major with the highest academic average.

Biology Department Excellence in Research Awards are given to graduating biology majors who have completed substantial research projects leading to presentation or publication in the scientific literature of their discipline.

John Kalb Award for Exemplary Research in Biology is presented to the graduating senior who completed the most substantial, independent research project in biology and who embodies the enthusiasm for scientific research as that displayed by the late Professor John Kalb.

Nancy Wohlschlag Distinguished Research Award is given to a graduating biology major who has completed a significant research project leading to presentation or publication in the scientific literature.

Chemistry/Biochemistry Department

American Chemical Society Undergraduate Award in Organic Chemistry is awarded to a graduating senior student majoring in either chemistry or biochemistry who has demonstrated excellence in organic chemistry based on a combination or research experience, coursework, and a desire to pursue a career in chemistry.

Distinction in Chemistry Award is awarded for outstanding performance (greater than 90%) on the DUCK Test (Diagnostic Undergraduate Chemistry Knowledge Test) as well as a GPA greater than 3.5.

Gerald Zon Chemistry/Biochemistry Undergraduate Research Award recognizes accomplishments in chemistry/biochemistry research.

Jeffrey M. Rose Award recognizes extraordinary service to the department and the student chapter of the American Chemical Society at Canisius, as well as excellence academic achievement.

Student General Excellence Award of the American Institute of Chemists is given in recognition of a demonstrated record of ability, leadership and professional promise within the field of chemistry.

Student General Excellence Awards of the WNY Section of the American Chemical Society, the department's highest awards, are presented to one chemistry and one biochemistry major who demonstrate outstanding academic achievement along with a strong commitment to service within our academic community.

Valerian A. Ruskiewicz Award for Distinction in Chemistry acknowledges superlative academic achievement demonstrated by the highest GPA in the department.

Classics Department

David B. Dietz Classics Book Award is given for outstanding performance in Classics courses.

Communication Studies Department

Academic Excellence in Communication Studies Award is given to the graduating Communication Studies senior with the highest GPA in the major.

Academic Excellence in Digital Media Arts Award is given to the graduating Digital Media Arts senior with the highest GPA in the major.

Academic Excellence in Journalism is given to the graduating Journalism senior with the highest GPA in the major.

Digital Media Arts Outstanding Portfolio Award recognizes an exceptional Digital Media Arts capstone project and portfolio. It is given to a student whose portfolio exhibits distinction in creativity, design, technical proficiency and professionalism.

Association of Women in Communication Scholarship Award is given to the graduating senior member of the association who served as an officer and has the highest GPA in the major.

American Advertising Federation Academic Excellence Award is given to the graduating senior member of the federation with the highest GPA in the major.

Public Relations Student Society of America Academic Excellence Award is given to the graduating senior member of the society with the highest GPA in the major.

Gene and Peter Jankowski Award of Excellence is given to a graduating senior in Communication Studies or Digital Media Arts who has demonstrated excellence in academic performance and television production.

WGRZ-TV Excellence in Multimedia Journalism Award is presented to a graduating senior Communication Studies major who has demonstrated outstanding skills and a commitment to journalism through the medium of television.

Society of Professional Journalists Award is given annually to the graduating Journalism student whose work best exemplifies the ideals of the program.

Computer Science Department

Computer Science Department Excellence in Academics Award is presented to graduating computer science majors who have achieved an outstanding academic performance.

Computer Science Department Excellence in Research Award is presented to graduating computer science majors who have achieved outstanding results in computer science research.

English Department

Charles A. Brady Award for Excellence in English is awarded to the graduating English major whose achievement in English courses and literary extra-curricular involvement has been superior throughout his or her college career.

G. E. Murray Award for Excellence in Creative Writing is awarded by the faculty to the graduating creative writing minor whose achievement in writing courses and whose own creative writing have been superior throughout his or her college career.

Leslie C. Warren Award for Academic Excellence is awarded to the graduating English major who has the highest academic average for his or her college career.

Environmental Science Program

Environmental Science Award for Academic Excellence is awarded to the graduating Environmental Science major with the highest academic average for his or her college career.

Environmental Science Award for Excellence in Research is awarded to the graduating Environmental Science major who has completed a substantial research project in environmental science leading to presentation and/or publication.

Environmental Studies Program

Rachel Carson Award for Outstanding Achievement in Environmental Studies is awarded to the graduating student with the highest GPA in the major and shows commitment to promoting environmental awareness in their work and study.

European Studies Program

Jean Monnet Award for European Studies is named for one of the founders of European integration. It recognizes achievement in European Studies in the classroom and through study-abroad and co-curricular activity.

Fine Arts Department

Edith DeLuca Memorial Award is given to a graduating senior who has contributed musically to the college and the community through excellence in musicianship, service and leadership. The student exemplifies the high standards and values of Edith DeLuca, the founder of the Buffalo Philharmonic Concert Series at Canisius College.

Thalia Feldman Memorial Award in Art History is awarded to a graduating senior in Art History who has maintained outstanding academic achievement and has demonstrated leadership in furthering an understanding of the importance of the visual arts in our community.

Outstanding Achievement in Visual Art Award is presented to a graduating senior whose visual creativity has contributed to Canisius College and the community through excellence in visual art, service and leadership, thereby exemplifying the high standards of Canisius College and the Fine Art Studio Program.

History Department

Professor William M. Harrigan Award for Excellence in History was inaugurated in 1971 to commemorate the late Dr. William M. Harrigan, chair of the History Department from 1960 to 1968. To promote excellence in historical scholarship, the award is presented to the senior who best exemplifies the standards of scholarship, interest in history and Christian values which Dr. Harrigan upheld.

Professor Edwin L. Neville Scholarship in History is given to a senior History major or Secondary Education/Social Studies major who will pursue an advanced degree in history or social studies, preferably in Asian history.

Professor Walter J. Sharrow Award is presented to a graduating senior who shows great promise as a teacher of history at the K-12 level.

International Relations Program

International Relations Academic Excellence Award is given to the senior with the highest GPA among International Relations majors.

International Relations Award for Global Understanding and Involvement is presented annually to the senior International Relations major demonstrating academic excellence and furthering international understanding.

Latin American Studies Department

Simon Bolivar Award for Latin American Studies presented to a Latin American studies senior who achieved high academic standing and demonstrated leadership in furthering the understanding of Latin American and/or Latino communities in the United States.

Mathematics & Statistics Department

Dr. Robert Tidd Award for Distinction in Mathematics is given to an outstanding senior upon recommendation by the Department of Mathematics and Statistics.

Dr. William M. Huebsch Award in Mathematics is given to a senior who combines excellent performance in mathematics with great promise in a career in the application of mathematics to other fields. The award is named in honor of Dr. Huebsch ’43, who was a former chair of the Mathematics department.

Military Science Program

General George C. Marshall Award is given annually by the George C. Marshall Foundation to the outstanding senior ROTC cadet in Buffalo.

Outstanding Military Graduate Award is given to a distinguished Canisius College cadet who demonstrates exceptional leadership potential, academic achievement and participation in ROTC activities.

Modern Languages Department

American Association of Teachers of French (AATF) Outstanding Senior in French Award is awarded to a student who has demonstrated exceptional commitment to the study of French through academic and extracurricular activities related to the language.

James J. McGoldrick Award for Excellence in German is awarded for excellence in the study of German language, literature, and culture.

Nebrija-Bello Award for Distinction in Spanish is bestowed annually on the graduating senior who best exemplifies the qualities of academic excellence and service in the field of Spanish language, literature and culture.

Philosophy Department

Rev. J. Clayton Murray, SJ, Award in Philosophy is awarded to the outstanding student in philosophy.

St. Thomas Aquinas Award in Philosophy is given, at the discretion of the Department of Philosophy, to a student who has demonstrated exceptional achievement in satisfying the college's curriculum requirements in philosophy.

Physics Department

Valerian A. Ruskiewicz Memorial Prize for Distinction in Physics is awarded annually to the member of the senior class who has the highest class standing throughout his/her course in physics.

Valerian A. Ruskiewicz Memorial Prize for Distinction in 3+2 Engineering is awarded to the student with outstanding achievement in the 3+2 Physics/ Engineering Program, who has mastered the fundamentals of both physics and engineering.

Political Science Department

Pi Sigma Alpha Award is given to the student who best exemplifies academic excellence and the pursuit of knowledge in political science.

Woodrow Wilson Award is awarded to the Political Science major who combines academic excellence with a demonstrated commitment to public service.

Psychology Department

Donald L. Tollefson Annual Psychology Award is bestowed annually to the senior who best personifies Donald L. Tollefson's ideals of intellectual inquiry and professional engagement in the field of psychology.

Outstanding Psychology Student Award is presented annually to graduating seniors with outstanding academic and pre-professional accomplishments in the field of psychology.

Susan K. Putnam Excellence in Behavioral Neuroscience Award is bestowed to a senior who demonstrated outstanding academic and pre-professional accomplishments in the areas of behavioral neuroscience/neuropsychology.

Religious Studies Department

Cyril O. Schommer SJ, Memorial Prize in Religious Studies is awarded to the senior whose written work demonstrates theological insights and mastery of one of the religious studies disciplines.

Dr. James P. McDermott Award in Religion & Life is given to the senior who manifests Dr. Jim McDermott's love of learning and his application of religious values in his daily life.

Sociology/Anthropology/Criminal Justice Department

Canisius College Anthropology Award is given to a graduating senior with the highest overall cumulative GPA in the major.

Dr. Jesse Nash, Jr. Sociology Award is given to the senior sociology major for academic excellence in sociology and a commitment to social justice in the legacy of Jesse Nash, Jr.

William H. Jarrett Criminal Justice Award is given to a senior criminal justice major for academic excellence in criminal justice and a commitment to ethics in the legacy of William H. Jarrett.

School of Education and Human Services Departmental/Program Awards

William F. Kean Award of Excellence in Education is given to the graduating major in the School of Education & Human Services with the highest academic average.

Adolescence Education

National Organization of Human Services Award is bestowed on a student who demonstrates excellence in academic performance, service to others, a commitment to social justice and a promise of a successful career in human services

Rev. Paul Nochelski, SJ, Award in Adolescence Education recognizes a graduating student who has demonstrated the hallmark of Fr. Paul Nochelski's life: a consistent dedication to academic excellence and to the Jesuit values of cura personalis and social justice.

Thomas W. Fitzsimons Award in Adolescence Education is bestowed upon a student who demonstrates excellence in academic performance, service to the college and the promise of a successful career in adolescence teaching.

Urban Education Award in Adolescence Education is presented to the adolescence education major who shows outstanding dedication to the Canisius College ideals of commitment to urban education and the betterment of our local community.

Counseling & Human Services Graduate Department

Thomas & Camille Caulfield Award is given to the graduate student counselor of the year.

Education Department

Bruce D. Perry, MD, PhD. Award in Early Childhood Education is given to the outstanding early childhood major who exemplifies knowledge, skills and dispositions as dictated by the practices proposed by the National Association of the Education of Young Children.

Donald J. Murphy Award in Childhood Education is bestowed upon a student who demonstrates excellence in academic performance, service to the college and the promise of a successful career in childhood teaching.

Dr. Kimberly A. Leavitt-Noble Award in Special Education is given to the graduating senior who has maintained a high level of scholarship and demonstrates a commitment to teaching children with special needs.

William D. Bennett Award is given to the graduating senior who demonstrates the hallmark of the late William Bennett's life: commitment to academic excellence and teaching in multi-cultural settings.

Kinesiology Department

Dr. Gregory K. Reeds Graduate Physical Education Teacher Education Award is given to an outstanding graduate physical education teacher candidate who best displays academic achievement and commitment to the physical education teaching profession. Honorees will also be recognized by the New York State Association for Health, Physical Education, Recreation and Dance (NYS AHPERD).

John T. Gabbey, MD. Award for Excellence in Athletic Training is presented to the graduating senior who has demonstrated outstanding skills in all aspects of the Athletic Training program.

Paul Demartinis Memorial Award in Health & Wellness is presented to an outstanding senior in health and wellness who is committed to service in the profession.

Rev. Edward F. Maloney, SJ, Physical Education Award is given to the graduating senior each year who best displays academic achievement, contributions to college life, participation in the department, including sponsored activities and demonstration of professional qualities.

Sport Management Department

Dr. Paul E. Bieron Sport Administration Award is given to an undergraduate student enrolled in sports management as a concentration. The student will have had overall high academic achievement, participated as a student intern in the sports industry and done significant scholarly work throughout the curriculum.

Wehle School of Business Departmental/Program Awards

Alpha Kappa Psi Scholarship Key is awarded annually to the graduate in the Richard J. Wehle School of Business who has attained the highest scholastic average over a three-year period. The award is made by the Delta Tau Chapter of Alpha Kappa Psi, the oldest national professional fraternity in commerce.

Academic Excellence in Business Award is given each year to a graduating senior(s) who has demonstrated outstanding academic achievement in the Richard J. Wehle School of Business.

Accounting Department

Bradley J. Shelp, Jr. Memorial Award represents the most prestigious honor the Department of Accounting can bestow upon an accounting student. This award is given on those occasions when the Department of Accounting identifies a senior accounting student who excels in demonstrated attributes of excellence in scholarship and service to the college.

Accounting Society Award for Excellence in Scholarship in the Accounting Program is awarded annually to the outstanding senior accounting major.

Accounting Society Award for Excellence in Scholarship in the Accounting Information Systems Program recognizes outstanding achievement by a senior AIS major and is given to the senior with the highest GPA in the AIS major courses.

Talal Abu-Ghazaleh International Award for Excellence in Graduate Accounting is awarded to an MBA graduate who is selected by the Committee of the Council on Accountancy at an overall outstanding student with the potential to make contributions to the accounting profession.

Economics/Finance Department

Nelson D. Civello Most Outstanding Graduate Award is given upon the recommendation of the faculty to the outstanding senior in the department.

Economics/Finance Department Best Finance Student Award is given to a graduating senior for academic excellence in finance.

John S. Murphy Award for Academic Excellence in Economics is given to a graduating senior for academic excellence in economics.

Entrepreneurship Program

Entrepreneurship Outstanding Student Award is given in recognition of academic excellence and commitment to entrepreneurial leadership as an entrepreneurship major.

International Business Program

International Business Outstanding Student Award recognizes a student who has demonstrated academic excellence in his/her major as well as achievement in extracurricular activities including study abroad, international internships and participation in international conferences.

Management Department

Thomas J. Schillo Scholarship is awarded to a senior for high standards of academic excellence and personal integrity.

Management Academic Excellence Award is presented annually to the top ten percent of senior management majors based on overall GPA.

Marketing Department

Donald E. Calvert Scholarship is awarded to a senior marketing or management student who displays superior academic and professional skills.

Marketing Academic Excellence Award is presented annually to the top ten percent of senior marketing majors based on overall GPA.

College of Arts and Sciences

Thomas A. Chambers, Dean
Barbara J. Porter, Associate Dean
Julie S. Gibert, Associate Dean

Mission Statement

The College of Arts & Sciences at Canisius provides an excellent liberal arts and sciences education by truly engaging students in the classroom, laboratory, studio, and broader community. As an integral part of a Catholic, Jesuit university the College of Arts & Sciences seeks to educate the whole person in preparation for service and leadership in a global society.

Academic Programs

The College of Arts and Sciences offers curricula leading to both undergraduate and graduate degrees. The undergraduate curricula provide programs in a wide range of disciplines in the humanities, fine arts, natural sciences, mathematics and social sciences. Each program combines the liberal-arts objectives of the Core Curriculum with the specific goals of a student's major field.

The College of Arts and Sciences also offers graduate programs leading to master of science degrees in Data Analytics (http://catalog.canisius.edu/graduate/college-arts-sciences/data-analytics/) or Anthrozoology (http://catalog.canisius.edu/graduate/college-arts-sciences/anthrozoology/).

Undergraduate Majors

Majors	Department
Animal Behavior, Ecology, and Conservation (ABEC)	Animal Behavior, Ecology, and Conservation (ABEC)
Biochemistry	Chemistry and Biochemistry
Biology	Biology
Chemistry	Chemistry and Biochemistry
Classics	Classics

Communication Studies	Communication
Computer Science	Computer Science
Creative and Performing Arts Interdisciplinary Studies	Fine Arts
Creative Writing	English
Criminal Justice	Sociology, Criminal Justice, and Environmental Studies
Digtal Media Arts	Communication
Economics	Economics (Wehle School of Business)
English	English
Environmental Science	Biology
Environmental Studies	Sociology, Criminal Justice, and Environmental Studies
European Studies	Political Science
History	History
Integrated Marketing Communication	Communication
International Relations	Political Science
Journalism	Communication
Mathematics	Mathematics and Statistics
Philosophy	Philosophy
Physics	Physics
Political Science	Political Science
Psychology	Psychology
Religious Studies and Theology	Religious Studies and Theology
Sociology	Sociology, Criminal Justice, and Environmental Studies
Spanish	Modern Languages, Literatures, and Cultures
Urban Studies	Political Science

Additionally, there are three interdisciplinary majors offered that require preapproval before declaration through the deans office:

- Humanities
- Social Science
- Specialized Studies

Undergraduate Minors

The many minors offered in the College of Arts and Sciences are identified in the descriptions of departmental offerings and available in the list of Undergraduate Minors A-Z (http://catalog.canisius.edu/undergraduate/minors/).

Institutes and Centers

Also housed in the College of Arts and Sciences are:

- The William H. Fitzpatrick Institute of Public Affairs and Leadership
- The Frank G. Raichle Pre-Law Center
- The George E. Schreiner Pre-Medical Center
- The Institute for the Global Study of Religion
- Institute for the Study of Human-Animal Relations

Animal Behavior, Ecology, and Conservation (BS)

Chair: Sue Margulis, PhD (%20margulis@canisius.edu)

Introduction

The Animal Behavior, Ecology, and Conservation Program combines the rigorous scientific study of Animal Behavior with a values-focused curriculum in the liberal arts tradition. It is for students who want to thoroughly understand the facts and theoretical underpinnings of animal behavior and who want to use that understanding to promote animal welfare and wildlife conservation. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the ABEC website (https://www.canisius.edu/academics/programs/animal-behavior-ecology-and-conservation/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Animal Behavior, Ecology, and Conservation.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

ABEC majors often choose to pursue one or more of the minors offered within the department (p. 85). Additionally, ABEC majors interested

in informal education should consider the education minor (p. 297) offered in the School of Education and Human Services.

Major Experiences

Many elective courses involve travel, field work, and/or service. The department also offers numerous internship opportunities. Students are encouraged to participate in these experiences.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

The ABEC major requires 7 courses, plus a total of 24 additional credits from elective courses:

Code	Title	Credits
ABEC 101	Introductory Animal Behavior I	3
ABEC 102	Introductory Animal Behavior II	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
Select one of the following conservation courses:		3
BIO 322	Conservation Biology	
ABEC 333	Conservation Behavior	
ABEC 335	Conservation Education	
Select one of the following math courses:		3-4
MAT 131	Statistics for Social Sciences	
MAT 141	Inferential Statistics and Computers for Science	
PSY 201	Basic Statistics for Behavioral Sciences	
PHI 245	Animal Ethics	3
Major Electives (chosen from the list below)		24
Total Credits		47-48

Major Electives

Twenty four credits must derive from the following electives:

Code	Title	Credits
ABEC 220 & 220L	Animal Learning and Animal Learning Lab	4
ABEC 250	Zoo Animal Husbandry	1
ABEC 251	Zoo Animal Management	3
ABEC 301	Research Participation (credit)	1
ABEC 302	Photographing Animal Behavior	1
ABEC 303	Shelter Behavior	1
ABEC 305	Assessing Animals	3
ABEC 332	Animal Welfare	3
ABEC 333	Conservation Behavior	3
ABEC 335	Conservation Education	3
ABEC 339	Animal Enrichment	3
ABEC 340	Research Methods in Animal Behavior	3
ABEC 341	Urban Ecology	3
ABEC 341L	Urban Ecology Lab (optional)	1
ABEC 342	Animal Geographies	3
ABEC 345	Herpetology	3
ABEC 345L	Herpetology Lab	1
ABEC 351	Zoo Exhibitry	1
ABEC 360	Observational Research Methods	4
ABEC 363	Canine Evolution, Behavior and Cognition	3
ABEC 370	Animal Cognition	3
ABEC 403	Tropical Ecology	1
ABEC 404	Wildlife Ecology and Conservation in Africa	3
ABEC 405	Field Studies in Political Ecology & Wildlife Conservation	3
ABEC 490	Canisius Ambassadors for Conservation (credit may vary)	4
ABEC 491	Internship 1	3
ABEC 492	Internship 2	3
ABEC 495	Independent Research	3
BIO 301	Research Methods (credit)	1
BIO 312	Primatology	3
BIO 316	Social Organization of Mammals	3
BIO 316L	Social Organization of Mammals Lab (optional)	1
BIO 317	Sex, Evolution and Behavior	3
BIO 320 & 320L	Field Ecology and Field Ecology Lab	4
BIO 322	Conservation Biology	3
BIO 325	Reproductive Biopsychology	3
BIO 343 & 343L	Entomology and Entomology Lab	4
BIO 355	Behavioral Neuroscience	3
BIO 364	Zoology: Diversity of Animal Life	3
BIO 364L	Zoology: Diversity of Animal Life Laboratory (optional)	1
BIO 366	Ornithology	3-4
or BIO 166	Biology of Birds	
BIO 375	Community Ecology	3
BIO 375L	Community Ecology Laboratory (optional)	1
BIO 377 & 377L	Freshwater Biology and Freshwater Biology Laboratory	4
BIO 378	Wetlands	3
BIO 378L	Wetlands Laboratory (optional)	1

Roadmap

Recommended Semester Schedule for Major Course Requirements:

Freshman	
Fall	**Spring**
ABEC 101	ABEC 102
BIO 111 & 111L	BIO 112 & 112L
Sophomore	
Fall	**Spring**
BIO 316 (ABEC elective)	BIO 317 (ABEC elective)
Math course (choose one of the following)	PHI 245
MAT 141	
MAT 131	
PSY 201	
Junior	
Fall	**Spring**
ABEC elective	ABEC elective
ABEC elective	ABEC elective
Conservation course (may be taken either semester in junior year)	Conservation course (may be taken either semester in junior year)
Senior	
Fall	**Spring**
ABEC elective	ABEC elective

Learning Goals & Objectives

Student Learning Goal 1

Students will demonstrate factual knowledge and theoretical understanding in the field of animal behavior.

Students will:

Objective A: Demonstrate mastery of topics: animal phylogeny-taxonomy, evolution of behavior, proximate causes of behavior, and anthropogenic impacts on non-human animals and the environment

Objective B: Separate observations from inferences

Student Learning Goal 2

Students will demonstrate practical knowledge and appropriate application of animal behavior and conservation in two of the following settings: domestic animals, captive wildlife, free-ranging wildlife

Students will:

Objective A: Generate realistic and effective solutions to simulated behavior problems in captive or domestic animals

Objective B: Generate realistic and effective solutions to simulated conservation problems

Objective C: Critically evaluate ethical implications of use or management of non-human animals

Student Learning Goal 3

Students will demonstrate scientific literacy and communication about science in written or oral form

Students will:

Objective A: Critically evaluate primary literature

Objective B: Interpret data

Objective C: Clearly articulate scientific ideas, concepts, and controversies

Minors

The ABEC program offers four minors for students who wish to concentrate in specific areas:

- Animal Behavior Minor (p. 88)
- Anthrozoology Minor (p. 88)
- Conservation Minor (p. 88)
- Zoo Biology Minor (p. 89)

For the ABEC minors, courses may be taken independently of the others and in any order. Interested students usually begin with the course that best fits their schedule. Most of the courses are offered every other year, so interested students should plan accordingly.

Additionally, the ABEC department contributes to the Education Minor (p. 297). ABEC majors with an interest in informal education may be interested in this minor. This minor does not lead to teacher certification.

Courses

ABEC 101 Introductory Animal Behavior I **3 Credits**
This course covers a broad overview of animal behavior, from the ideas and theories that have shaped the field to basic approaches used to study behavior. We will discuss behavior from a variety of animals, ranging from insects to mammals (including humans!). Special attention will be given to examining the research that shapes the field.
Offered: every fall.

ABEC 102 Introductory Animal Behavior II **3 Credits**
Foundational evolutionary and ecological theories in Animal Behavior. Explore key behaviors that lead to an animal's survival including foraging, mating, habitat selection, and social behavior as well as methods to study animal behavior. Also compare animal behavior in the news to the scientific literature
Offered: every spring.

ABEC 220 Animal Learning **3 Credits**
Animal learning and memory research with emphasis on practical animal training. Lab required.
Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 220L.
Offered: every spring.

ABEC 220L Animal Learning Lab **1 Credit**
Required animal learning lab that emphasizes practical animal training.
Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 220.
Offered: every spring.

ABEC 250 Zoo Animal Husbandry **1 Credit**
Topics in animal husbandry in the zoo setting. Focus is on the specific needs of different taxonomic groups, environmental management, veterinary monitoring, nutrition, and programming.
Prerequisites: ABEC 101 & ABEC 102.
Offered: Spring of odd-numbered years.

ABEC 251 Zoo Animal Management **3 Credits**
Modern practices in zoo mission implementation. Focus on managing many facets of zoos: individual animals, populations of animals, visitors, research, education, staff, and budgets. The course is highly project-based and involves considerable group work and participation.
Prerequisites: ABEC 101 & ABEC 102.
Offered: every spring.

ABEC 300 Research Participation (no credit) **0 Credits**
Recognition for ABEC research assistants, does not carry and credits.
Restriction: permission of instructor.
Offered: every semester."

ABEC 301 Research Participation (credit) **1 Credit**
Recognition for ABEC research assistants. Can be taken up to 3 times for major elective credit; more than three times credit is free-elective.
Restriction: permission of instructor.
Offered: every semester.

ABEC 303 Shelter Behavior **1 Credit**
This course will expose students to a variety of animal sheltering models. Students will assess the impacts of each type of model on the behavior of shelter animals and prospective adopters. Students will also take an in-depth look at why so many animals are relinquished to shelters and at the programs shelters have established to help keep pets in their homes.
Prerequisites: ABEC 101 and ABEC 102.
Offered: every fall.

ABEC 305 Assessing Animals **3 Credits**
Assessing Animals will focus on applied behavioral analysis of non-human animals through various methodologies including functional assessments. Students will learn how to use such assessments to achieve behavioral goals through problem solving strategies for non-human animals. Occasional (1-2) weekend days may be required.
Prerequisites: ABEC 101 & ABEC 102.
Offered: every fall.

ABEC 319 Anthrozoology **3 Credits**
An engagement with the fundamental issues of the field of Anthrozoology by evaluating the history of human/ nonhuman interactions, the categories into which humans have sorted animals, and a variety of science-based and value-based approaches to humans' inevitable intersection with other living beings.
Prerequisite: ABEC 101 & ABEC 102 or ABEC 215.
Offered: every spring.

ABEC 332 Animal Welfare **3 Credits**
This course will examine critical debates and controversies surrounding our care and use of animals. We will use a case study approach, and use scientific research to evaluate real world issues in animal welfare. The case studies will cover companion animals, wildlife, zoo animals, and animals used in agriculture and research. This course involves significant writing.
Prerequisite: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.
Fulfills College Core: Advanced Writing-Intensive
Offered: every spring.

ABEC 333 Conservation Behavior **3 Credits**
How human activity has altered the planet and how those modifications affect the behavior of animals. Review of key principles through the lens of Behavioral Ecology in regards to species requirements for survival, major threats to species existence, and conservation solutions to reduce those threats. Identification of positive human behavior for conservation outcomes.
Prerequisites: ABEC 101 & ABEC 102.
Offered: every fall.

ABEC 335 Conservation Education **3 Credits**
Applying the theories and principles of conservation pyschology to education in informal settings (zoos, aquariums, wildlife refuge). Assessing attitude and behavioral outcomes of conservatin education programs.
Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.
Offered: most fall semesters.

ABEC 336 Child Animal Studies **3 Credits**
This course considers how animals play distinct roles in child development, children's cultures, and even in the social construction of 'childhood.' It draws upon psychology, ethology, ethics, cultural studies, education, and anthropology.
Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.
Offered: spring of odd-numbered years.

ABEC 339 Animal Enrichment **3 Credits**
This course emphasizes the roll of enrichment in various contexts (laboratory, shelter, and zoo). Multiple opportunities to design and implement enrichment are provided. The course uses the S-P-I-D-E-R framework for enrichment design and effectiveness.
Prerequisites: ABEC 101 & ABEC 102.
Offered: spring of even-numbered years.

ABEC 340 Research Methods in Animal Behavior **3 Credits**
Observational and experimental research methods commonly used in studies of wild, captive, and domesticated animals. Evaluate peer-reviewed journal articles, research questions and hypotheses, collect behavioral data in observational and experimental contexts, and analyze and interpret data.
Prerequisites: ABEC 101, ABEC 102, & one of the following: MAT 131, MAT 141, or PSY 202.
Fulfills College Core: Advanced Writing-Intensive
Offered: every fall.

ABEC 341 Urban Ecology **3 Credits**
Critical examination of the natural ecosystems in which cities are embedded, from soil and vegetation to biodiversity and landscape scale processes. Investigations into how cities are both centers of human production and consumption that shape global ecologies as well as areas of critical habitat for nonhuman animals, with an aim to understand and promote coexistence.
Prerequisites: ABEC 101 & ABEC 102.
Offered: fall of even-numbered years.

ABEC 341L Urban Ecology Lab **1 Credit**
Using Buffalo as a natural laboratory, visit urban sites of varying characteristics to analyze the effects of different types of urban development and management on ecosystems. Speak to local managers, collect and analyze ecological data, observe urban impacts to wildlife and ecosystems, as well as the connection between social and ecological systems in Buffalo.
Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 341.
Offered: fall of even-numbered years.

ABEC 342 Animal Geographies **3 Credits**
Study of the entanglings of human-animal relations with space, place, location, environment and landscape.
Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.
Offered: spring of even-numbered years.

ABEC 345 Herpetology **3 Credits**
This course will explore the diversity, evolutionary relationships, ecology, behavior, and conservation of reptiles and amphibians.
Prerequisite: BIO 111 & BIO 112.
Offered: occasionally.

ABEC 345L Herpetology Lab **1 Credit**
Optional laboratory for ABEC 345 (herpetology) covers field techniques, applied conservation methods, taxonomic diversity, and identification of local species. Seats in the laboratory section are first come, first serve.
Prerequisite: BIO 111 & BIO 112. **Corequisite:** ABEC345.
Offered: occasionally.

ABEC 351 Zoo Exhibitry **1 Credit**
Critical evaluation of zoo design principles. Involves travel to obtain first-hand study of distant zoological institutions. Additional fee required. Cost varies based on destination, but generally are between $200 and $350.
Prerequisite: ABEC 101 or ABEC 102.
Offered: annually.

ABEC 360 Observational Research Methods **4 Credits**
Study of the principal procedures used in animal behavior research. Involves the conduct of independent research project, from formulation of hypothesis through to presentation of results. Statistical analysis of data is a key component of the class, and students are expected to have completed their statistics requirement.
Prerequisites: ABEC 101, ABEC 102, & one of the following: MAT 131, MAT 141, or PSY 201. **Restriction:** juniors and seniors only.
Fulfills College Core: Advanced Writing-Intensive
Offered: spring of odd-numbered years.

ABEC 363 Canine Evolution, Behavior and Cognition **3 Credits**
Introduction to the latest theories regarding how dogs evolved and were domesticated; how dogs communicate with humans and with each other, exposure to ground-breaking research into dog behavior, learning, cooperation, and cognition.
Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.
Offered: every spring.

ABEC 370 Animal Cognition **3 Credits**
This course will critically examine the mental lives of animals. We will attempt to better understand what animals are thinking and how and why they make particular decisions. The emphasis of this course is on critically evaluating research claiming to demonstrate or refute the presence of cognitive abilities across species. Topics studied will include perception, tool use, communication, emotions, and many more.
Prerequisite: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.
Offered: every spring.

ABEC 403 Tropical Ecology **1 Credit**
Students will travel to tropical areas in Central or South America over Spring Break to learn tropical ecology first hand. The course will take students to both cloud forest and lowland rainforest ecosystems. Students will complete readings and mini-projects while in the field. Additional fee required and varies with location (generally about $2500) which covers all travel costs. Please contact the course instructor for current fees.
Prerequisites: ABEC 101 or ABEC 102.
Offered: most springs.

ABEC 404 Wildlife Ecology and Conservation in Africa **3 Credits**
Field experience in Africa, emphasizing field methods for animal observation, community-based conservation, and wildlife behavior and management. This course involves early application (previous fall), AND travel during summer. Additional fee required. Please contact the course instructor for current fees.
Prerequisite: ABEC 101 & ABEC 102. **Restriction:** seniors only and permission of instructor.
Fulfills College Core: Core Capstone
Offered: every fall.

ABEC 405 Field Studies in Political Ecology & Wildlife Conservation **3 Credits**
This field course provides an in-depth look at the complex sociocultural and political aspects of wildlife conservation and environmental sustainability by immersing students in research, workshops, readings, and discussions with local community groups and conservation experts in Costa Rica. We will travel to the capital of San Jose, where we will meet with professors working at University for Peace, to learn about some of the history around conservation, indigenous peoples, and sustainability in Costa Rica. We will also learn about current work being done at the national and local level in areas of environmental education and community advocacy. We will then travel to Santa Elena to spend five days engaged in wildlife tours, participating in education workshops, and hearing from guest speakers about re-wilding projects, river protection, sustainable farming, and new ecotourism programs. Finally, we will travel to the beautiful coastal town of Manuel Antonio to stay and volunteer with Kids Saving the Rainforest, a non-profit organization dedicated to wildlife rehabilitation, environmental education, and conservation of wildlife. We will work with the public in small research projects at Manuel Antonio National Park to learn about human-wildlife interactions there. Additional fee required. Please contact the course instructor for current fees.
Prerequisites: ABEC 101 & ABEC 102.
Offered: fall of odd-numbered years.

ABEC 490 Canisius Ambassadors for Conservation **4 Credits**
Field study of endangered species and ecology, followed by educational outreach to school and public audiences.
Prerequisites: ABEC 101 & ABEC 102.
Offered: every semester.

ABEC 491 Internship 1 **3 Credits**
Internship in animal-related setting. Joint supervision by faculty and agency personnel. Application of classroom lessons to real-world situations. Students should register for the section most closely related to the intership activities. Section A is Anthrozoology, Section B is Animal Behavior, Secion C is Conservation, and Section Z is Zoo Biology.
Prerequisites: ABEC 101 and 102, junior or senior standing, minimum GPA of 2.0 in the major, a positive recommendation from a faculty member, & a completed & approved internship application..

ABEC 492 Internship 2 **3 Credits**
Internship in animal-related setting. Joint supervision by faculty and agency personnel. Application of classroom lessons to real-world situations. Students should register for the section most closely related to the intership activities. Section A is Anthrozoology, Section B is Animal Behavior, Secion C is Conservation, and Section Z is Zoo Biology.
Prerequisites: junior or senior standing, minimum GPA of 2.0 in the major, a positive recommendation from a faculty member, & a completed & approved internship application.

ABEC 495 Independent Research **3 Credits**
Independent project conducted under the supervision of a faculty member.
Prerequisites: ABEC 101 & ABEC 102. **Restriction:** permission of instructor.

Animal Behavior Minor

The Animal Behavior Minor is designed for students who want to concentrate on animal behavior as a topic of study. This minor is open to any student from any major, except ABEC.

Code	Title	Credits
Required Courses		
ABEC 101	Introductory Animal Behavior I	3
ABEC 102	Introductory Animal Behavior II	3
Additional Courses		
Select 12 credits from the following:		12
ABEC 220 & 220L	Animal Learning and Animal Learning Lab	
ABEC 303	Shelter Behavior	
ABEC 305	Assessing Animals	
ABEC 332	Animal Welfare	
ABEC 333	Conservation Behavior	
ABEC 339	Animal Enrichment	
ABEC 360	Observational Research Methods	
ABEC 363	Canine Evolution, Behavior and Cognition	
ABEC 370	Animal Cognition	
ABEC 404	Wildlife Ecology and Conservation in Africa	
ABEC 495	Independent Research (Animal Behavior Project) [1]	
ABEC 491	Internship 1 (Animal Behavior based)	
ABEC 492	Internship 2 (Animal Behavior based)	
BIO 312	Primatology	
BIO 316	Social Organization of Mammals (add'l 1 cr lab optional)	
BIO 317	Sex, Evolution and Behavior	
BIO 355	Behavioral Neuroscience	
BIO 366	Ornithology	
or BIO 166	Biology of Birds	
ABEC 340	Research Methods in Animal Behavior	3
Total Credits		21

[1] May be taken with permission of the program director.

Anthrozoology Minor

The Anthrozoology Minor is designed for students who want to concentrate on mankind's relationships with other animal species. This minor is open to any student from any major.

Code	Title	Credits
Required Course		
ABEC 319	Anthrozoology	3
Additional Courses		
Select 15 credits from the following:		15
ABEC 303	Shelter Behavior	
ABEC 332	Animal Welfare	
ABEC 335	Conservation Education	
ABEC 336	Child Animal Studies	
ABEC 342	Animal Geographies	
ABEC 363	Canine Evolution, Behavior and Cognition	
ABEC 405	Field Studies in Political Ecology & Wildlife Conservation	
ABEC 490	Canisius Ambassadors for Conservation	
ABEC 491	Internship 1 (491A, Anthrozoology Related)	
ABEC 492	Internship 2 (492A, Anthrozoology Related)	
ABEC 495	Independent Research (Anthrozoology Project) [1]	
CLS 219	Animals in the Ancient World	
ENG 285	Animals in Film and Literature	
FAH 272	Animals in Art	
PHI 245	Animal Ethics	
RST 229	Religious Perspectives on Animals	
Total Credits		18

[1] ABEC 495 may be used for the minor with permission of program director.

Conservation Minor

The conservation minor is designed for students who want to expand their experience in conservation biology, education, and ecology to prepare for conservation-related careers.

Curriculum

The conservation minor consists of 6 courses.

Code	Title	Credits
Choose 2 of the following conservation courses:		6
BIO 322	Conservation Biology	
ABEC 333	Conservation Behavior	
ABEC 335	Conservation Education	
Choose at least one class from each of the following 4 areas (labs either required or optional):		
Area 1: Skills		3-4
SOC 315	Geographical Information Systems (GIS) for the Social Sciences	
BIO 320	Field Ecology	
ABEC 335	Conservation Education [1]	
ABEC 404	Wildlife Ecology and Conservation in Africa	
Internship in Conservation		
ABEC 491	Internship 1 (must take 491C)	
ABEC 492	Internship 2 (must take 492C)	
EVST 498	Internship	
Area 2: Applications		3-4
ABEC 333	Conservation Behavior [1]	
ABEC 341	Urban Ecology	
BIO 322	Conservation Biology [1]	
BIO 375	Community Ecology	
BIO 378	Wetlands	
BIO 406	Population and Conservation Genetics	
Area 3: Conservation History		3
EVST 250	Nature, Culture and Interpretation	
EVST 259	Environmental History of the United States	
PHI 244	Environmental Ethics	
RST 347	Ecotheology	

Area 4: Social Science		3
ABEC 342	Animal Geographies	
ABEC 405	Field Studies in Political Ecology & Wildlife Conservation	
EVST 235	Environmental Policy	
EVST 275	Global Environmental Problems	
SOC 234	Environment and Society	

[1] Can be taken as a track if not taken as one of the required courses.

Zoo Biology Minor

The Zoo Biology minor is designed for students who want training relevant to careers associated with captive exotic animals. This minor is open to any student from any major.

Code	Title	Credits
Required Course		
ABEC 251	Zoo Animal Management	3
Additional Courses		
Select 15 credits from the following:		15
ABEC 220 & 220L	Animal Learning and Animal Learning Lab	
ABEC 250	Zoo Animal Husbandry	
ABEC 332	Animal Welfare	
ABEC 335	Conservation Education	
ABEC 339	Animal Enrichment	
ABEC 351	Zoo Exhibitry	
ABEC 360	Observational Research Methods	
ABEC 491	Internship 1 (Zoo/Aquarium based)	
ABEC 492	Internship 2 (Zoo/Aquarium based)	
ABEC 495	Independent Research (Zoo/Aquarium based) [1]	
BIO 150	Animal Nutrition	
FAH 273	Field Excursion: Connections between Museum and Zoo Exhibitry Practices	
Total Credits		18

[1] ABEC 495 may be used for the minor with permission of program director.

Biochemistry (BS)

Chair: Phillip M. Sheridan, PhD

Introduction

Biochemistry graduates enter a variety of professions, including careers in research and industry, the health professions, teaching, technical writing, business, sales, patent law and civil service. A major in biochemistry is an excellent preparation for entrance into medical, dental and pharmacy schools. It also prepares students to enter a range of graduate programs including biochemistry, biotechnology, bioinformatics, medicinal chemistry, bioengineering, business and law.

The Department of Chemistry and Biochemistry offers two tracks that lead to a BS degree in Biochemistry. They are the Biochemistry BS track certified by the American Chemical Society (BCH track certified by ACS) and Biochemistry BS track designed for students who intend to pursue employment in industry (BCH track). Both BCH tracks are appropriate for pre-health professional students.

Advisors in the Department will help you choose the track that best fits your interests and career plans. Students in both program tracks will gain hands-on experience with a wide variety of modern, sophisticated laboratory instrumentation; this helps provide the experience necessary to be competitive in today's job market and/or to gain entrance into highly ranked graduate programs.

Both Biochemistry tracks can be completed with a business minor. This option provides a very useful preparation for employment in sales, marketing, or other industrial professions, as well as preparing students for graduate studies in business or administration.

Please go to the Chemistry and Biochemistry website (https://www.canisius.edu/academics/programs/chemistry-and-biochemistry/) for a more detailed description of the program, faculty, facilities, and academic and co-curricular opportunities.

Qualifications

Students must attain the grade of C or greater in General Chemistry II (CHM 112) and C- or greater in Organic Chemistry II (CHM 228) in order to progress into the major. Several two semester courses (CHM 111 and CHM 112, CHM 227 and CHM 228, BCH 301 and BCH 302) have a requirement for a minimum grade of C- in the first course to continue with the second course.

Advisement

All students have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Students who are still deciding on a major should go the the Griff Center for Academic Engagement for advisement including course selection prior to registration. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Major Experiences

Following their freshman year, and sometimes earlier, chemistry and biochemistry majors are encouraged to become involved in research or other professional projects. Stipends are often available so that work can be done on these projects during the summer and school year in the Department. Summer work in industrial laboratories and research institutions is also available. Our close relationship with local industries and institutions aids students in job placement before and after graduation. Students may also choose to undertake industrial internships for advanced elective course credit.

Special Programs Offered by the Department

Early Assurance Program with University at Buffalo Medical School or Syracuse Medical School

Qualified students may apply to the University at Buffalo Medical School or Syracuse University Medical School during their sophomore year. Those accepted will be admitted into the Medical School freshman class after their graduation from Canisius.

Early Assurance Program with University at Buffalo Dental School

Qualified students may apply to the University at Buffalo Dental School during their sophomore year. Those accepted will be admitted into the Dental School freshman class after their graduation from Canisius.

Pre-Medical and Pre-Dental

The Chemistry and Biochemistry BS degrees are excellent preparations for entering into medical and dental schools, and a third of the graduates from this Department enter into these programs. Students applying to medical or dental schools must take the Medical College Admission Test (MCAT) or Dental Admission Test (DAT).

Pre-Pharmacy

For pre-pharmacy students we recommend the Chemistry Health Professions track, since students in this track can meet all pharmacy school entrance requirements. Students applying to most pharmacy schools must take the Pharmacy College Admission Test (PCAT).

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Biochemistry Major with ACS-certification

Biochemistry BS track certified by the American Chemical Society is recommended for students planning to attend graduate school. This track is also appropriate for students who plan careers in the health professions.

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory	4
CHM 244	Inorganic Chemistry	3
CHM 301 & 301L	Fundamental Physical Chemistry and Fundamental Physical Chemistry Laboratory	4
CHM 302 & 302L	Modern Physical Chemistry and Modern Physical Chemistry Laboratory	4
Select one of the following:		4
CHM 334 & 334L	Spectrometric Analysis and Spectrometric Analysis Lab	
CHM 430 & 430L	Instrumental Analytical Chemistry and Instrumental Analytical Chemistry Laboratory	
CHM 420	Materials Chemistry	3
CHM 381	Scientific Literature and Communication	1
CHM 480	Communicating Concepts in Chemistry	1
CHM 481	Communicating Research Literature	1
BCH 301 & 301L	Introduction to Biochemistry and Introduction to Biochemistry Laboratory	4
BCH 302	Cellular Biochemistry	3
BCH 403 & 403L	Molecular Biology and Molecular Biology Laboratory	4
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
MAT 111	Calculus I	4
MAT 112	Calculus II	4
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
Total Credits		76

Biochemistry Track

Biochemistry BS track designed for students who intend to pursue employment in industry. This track is also appropriate for students who plan careers in the health professions.

Code	Title	Credits
Required Science Courses		
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 244	Inorganic Chemistry	3
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
CHM 301	Fundamental Physical Chemistry	3
Select one of the following:		4
CHM 334 & 334L	Spectrometric Analysis and Spectrometric Analysis Lab	
CHM 430 & 430L	Instrumental Analytical Chemistry and Instrumental Analytical Chemistry Laboratory	
CHM 381	Scientific Literature and Communication	1
CHM 480	Communicating Concepts in Chemistry	1
CHM 481	Communicating Research Literature	1
Choose one Chemistry (CHM), Biochemistry (BCH), or Biology (BIO) Elective (300- or 400-level course)		3
Choose one Biochemistry (BCH) Elective [1]		3
BCH 301 & 301L	Introduction to Biochemistry and Introduction to Biochemistry Laboratory	4
BCH 302	Cellular Biochemistry	3
BCH 403 & 403L	Molecular Biology and Molecular Biology Laboratory	4
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
MAT 111	Calculus I	4
MAT 112	Calculus II [2]	4
or MAT 141	Inferential Statistics and Computers for Science	
PHY 201 & 201L	College Physics I and College Physics I Laboratory	4
PHY 202 & 202L	College Physics II and College Physics II Laboratory	4
Total Credits		70

1 Choose from any 300- or 400-level BCH course not used to fulfill specific major requirements or CHM 344 (if not used to fulfill spectroscopy requirement), CHM 450, CHM 455, BIO 408, BIO 414, BIO 419, BIO 430, BIO 440, or BIO 444.

2 Students minoring in business may take ECO 255 in lieu of MAT 112 or MAT 141.

Roadmap

Recommended Semester Schedule for Major Course Requirements

BCH ACS Certified Track

Freshman	
Fall	**Spring**
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 112
Sophomore	
Fall	**Spring**
CHM 227 & 227L	CHM 228 & 228L
CHM 244	PHY 223 & 223L
Junior	
Fall	**Spring**
BCH 301 & 301L	BCH 302
PHY 224 & 224L	CHM 230 & 230L
CHM 381	CHM 480
CHM 420	
Senior	
Fall	**Spring**
CHM 301 & 301L	CHM 430 & 430L[1]
CHM 334 & 334L[1]	CHM 302 & 302L
CHM 481	BCH 403 & 403L

1 Either CHM 334/CHM 334L or CHM 430/CHM 430L is required.

BCH ACS Certified Track with Business Minor

Freshman	
Fall	**Spring**
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 112
Sophomore	
Fall	**Spring**
CHM 227 & 227L	CHM 228 & 228L
CHM 244	PHY 223 & 223L
ECO 101	ECO 102
	MAT 141 or ECO 255

Junior

Fall	Spring
BCH 301 & 301L	BCH 302
PHY 224 & 224L	CHM 230 & 230L
CHM 381	CHM 480
CHM 420	MGT 101

Senior

Fall	Spring
CHM 301 & 301L	CHM 430 & 430L[1]
CHM 334 & 334L[1]	CHM 302 & 302L
CHM 481	BCH 403 & 403L
ACC 201	FIN 201
MKT 201	

[1] Either CHM 334/CHM 334L or CHM 430/CHM 430L is required.

BCH Track

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 141 or 112

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L

Junior

Fall	Spring
BCH 301 & 301L	BCH 302
CHM 244	CHM 480
CHM 381	BCH elective

Senior

Fall	Spring
CHM 301	CHM 430 & 430L[1]
CHM 334 & 334L[1]	BCH 403 & 403L
CHM 481	CHM Elective or BCH Elective

[1] Either CHM 334/CHM 334L or CHM 430/CHM 430L is required.

BCH Track with Business Minor

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 141 or ECO 255

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L
ECO 101	ECO 102

Junior

Fall	Spring
BCH 301 & 301L	BCH 302
CHM 244	CHM 480
CHM 381	MGT 101
	BCH elective

Senior

Fall	Spring
CHM 301	CHM 430 & 430L[1]
CHM 334 & 334L[1]	BCH 403 & 403L
CHM 481	CHM or BCH Elective
ACC 201	FIN 201
MKT 201	

[1] Either CHM 334/CHM 334L or CHM 430/CHM 430L is required.

Learning Goals & Objectives

Student Learning Goal 1:

Knowledge; Department majors will demonstrate an understanding of fundamental chemical concepts.

- Objective A: Concepts; Demonstrate broad knowledge of chemical concepts;
- Objective B: Reactions; Predict and analyze the effects of chemical changes;
- Objective C: Derivations; Manipulate expressions of chemical quantities to derive higher-order relationships;
- Objective D: Safety; Demonstrate knowledge of chemical, instrumental and workplace safety.

Student Learning Goal 2:

Professional Skills; Department majors will be able to work effectively in a professional or laboratory setting.

- Objective A: Scientific Literacy; Identify, access and use chemical literature sources;
- Objective B: Scientific Method; Define chemical problems, then formulate hypotheses and design experiments to address them;

- Objective C: Laboratory Skills; Carry out experiments (follow directions, manipulate materials and lab apparatus, record data);
- Objective D: Laboratory Instrumentation; Use modern instrumentation (prepare samples, operate systems, troubleshoot common problems, organize and label data).

Student Learning Goal 3:

Communication; Department majors will be proficient in the communication of chemical information.

- Objective A: Oral Communication; Construct and deliver an effective oral presentation;
- Objective B: Written Communication; Write an effective, properly formatted scientific report.

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Courses

BCH 301 Introduction to Biochemistry **3 Credits**
Structure and function of biological molecules. Topics include proteins, carbohydrates, nucleic acids, lipids,enzyme kinetics, ligand binding, recombinant DNA technology and cell membrane structure and transport.Three lectures and one recitation per week.
Prerequisite: minimum grade of C- in CHM 228.
Offered: every fall.

BCH 301L Introduction to Biochemistry Laboratory **1 Credit**
One four-hour lab per week.
Prerequisite: BCH 301 (or concurrent registration).
Offered: every fall.

BCH 302 Cellular Biochemistry **3 Credits**
The more biological aspects of biochemistry. Topics include signal transduction, bioenergetics, metabolism of carbohydrates, lipids, proteins and metabolic control,emphasizing hormones. Three lectures and one recitation per week.
Prerequisite: minimum grade of C- in BCH 301.
Offered: every spring.

BCH 403 Molecular Biology **3 Credits**
Biochemical processes at the cellular and molecular level. Topics include DNA structure in chromosomes, replication, repair, and recombination, DNA transcription, RNA structure and function, protein translation and regulation of these processes.
Prerequisite: minimum grade of C- in BCH 301.
Offered: every spring.

BCH 403L Molecular Biology Laboratory **1 Credit**
One four-hour lab per week.
Prerequisite: BCH 301L & BCH 403 (or concurrent registration in BCH 403).
Fulfills College Core: Advanced Writing-Intensive
Offered: every spring.

BCH 450 Research in Biochemistry **3 Credits**
Independent research under the direction of the biochemistry faculty. Students are required to spend 9 hours per week conducting research. BCH 450 may be taken in place of a biochemistry elective without lab. Research and consultation times to be arranged after approval of department chair.
Prerequisite: permission of department chair.
Offered: fall & spring.

BCH 451 Research in Biochemistry **4 Credits**
Independent research under the direction of the biochemistry faculty. Students are required to spend 12 hours per week conducting research. BCH 451 may be taken in place of a biochemistry elective with lab. Research and consultation times to be arranged after approval of department chair.
Prerequisite: permission of department chair.
Offered: fall & spring.

BCH 499 Independent Study **3 Credits**
Independent study under the direction of the biochemistry professor. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: fall & spring.

Biology (BS)

Chairs: Andrew Stewart, PhD (stewar34@canisius.edu) **and** Lisa Morey, PhD (moreyl@canisius.edu)

Introduction

The Biology major offers broad training in the biological sciences and balances organismal with cellular/molecular biology. This background serves as a solid preparation for

1. future graduate level education in the biological sciences
2. future professional education in clinical and health-related sciences
3. employment at the bachelor's level
4. additional training in other disciplines that require a thorough understanding of biology, such as various areas of business, communications, engineering, law and social policy development

The biology program of study combines lectures and a hands-on learning experience in both its core and elective courses. The elective courses offered within the major cover a variety of biological fields, which allow students to sample many areas of biology or to investigate more thoroughly specific areas of special interest. In addition, the opportunity to perform independent research with a faculty member in the Biology Department helps develop additional skills not normally offered in undergraduate courses and provides additional opportunities to apply the knowledge acquired in coursework. Please see the website (https://www.canisius.edu/academics/programs/biology/) for a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities. Canisius has developed programs for students interested in Early Assurance Acceptance into the SUNY Upstate (College of Medicine) and Lake Erie College of Osteopathic Medicine (College of Medicine, School of Dental Medicine and School of Pharmacy); Joint Degree Programs with the University at Buffalo (School of Dental Medicine and School of Pharmacy), Lake Erie College of Osteopathic Medicine (College of Medicine, School of Dental Medicine and School of Pharmacy), and SUNY College of Optometry. Canisius also has a Memorandum of Understanding with the Ontario Veterinary College, University of Guelph. In addition, a series of specialized courses have been developed for the non-science major that relate biological concepts and scientific methodologies to societal issues facing humankind as a result of technological advances. For more information please view the department's Biology website (https://www.canisius.edu/academics/programs/biology/).

Qualifications

Students must maintain a 2.0 overall average to graduate with a degree in Biology. Students must attain a C- or greater in each of the introductory

courses (BIO 111, BIO 112, and BIO 211) in order to progress into the next course in the Biology sequence. Students must have a C- or better in BIO 212 and successfully complete BIO 211L and BIO 212L to take any 400-level Biology courses.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

In addition to academic advisement for the major, advisement relevant to career options in the biological sciences, including pre-clinical and research interests, is also provided.

Major Experiences

All faculty in the Biology Department are research-active and maintain their own research program at Canisius. Students interested in pursuing research opportunities with Biology faculty are encouraged to speak with individual faculty members about their work and research opportunities in their respective laboratories.

Biology with Distinction

This degree option for the biology program is intended for biology majors who have a true interest in research and may have career interests in biological or biomedical research. Upon graduation they will receive certification of completing their major with distinction. Program requirements include writing of a formal research proposal to be submitted to their thesis committee, completion of the research project (600 research hours minimum), writing the final thesis paper, and presentation of a departmental seminar with verbal thesis defense in front of their committee. Interested students must apply to this program by January of their junior year. See the department chair for complete details including appropriate paperwork.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Additional Course Considerations

It is particularly important that the biology major maintain the indicated required science course sequence to ensure prerequisite requirements are met for upper-level courses and to ensure that all basic requirements have been completed prior to taking standardized graduate/professional school entrance examinations (e.g. GRE, MCAT, DAT). These exams are normally taken late in spring semester of the junior year. Biology majors normally take BIO 111/BIO 112 and CHM 111/CHM 112 in the freshman year, and BIO 211/BIO 212 and CHM 227/CHM 228 in the sophomore year so that they stay on schedule for completing the major requirements. In selecting courses for the major, students should consult carefully with their advisors each semester about the best selection of courses for the coming semesters. In addition, students will want to consult the on-line advisement guide, which is published each semester and contains valuable information about course offerings for the coming semester's offerings.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

The Biology curriculum fulfills all requirements and prepares students well for graduate programs in the biological sciences, and for schools of allopathic (MD) and osteopathic (DO) medicine, dentistry, veterinary medicine, and several allied health programs including, but not limited to, chiropractic, optometry, physician's assistant, and podiatry.

Biology Major Course Requirements

Code	Title	Credits
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II	4
BIO 351	Biology Seminar I	1
BIO 353	Biology Seminar II	1
Biology Electives (6 courses as described below)		22

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory [1]	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
PHY 201 & 201L	College Physics I and College Physics I Laboratory	4
PHY 202 & 202L	College Physics II and College Physics II Laboratory	4
Select one of the following mathematics electives options:		8
Option 1:		
MAT 111	Calculus I [1]	
MAT 141	Inferential Statistics and Computers for Science	
or PSY 201	Basic Statistics for Behavioral Sciences	
Option 2:		
MAT 111 & MAT 112	Calculus I and Calculus II [1]	
Option 3:		
One year of statistics for sciences		
Total Credits		72

[1] **Note:** The combination of MAT 109 and MAT 110 can be taken in place of MAT 111; likewise, the combination of CHM 109 and CHM 110 can be taken in place of CHM 111.

Major Electives

Six 300- or 400-level lecture courses, four with associated laboratories.

Code	Title	Credits
Select one course with its associated laboratory from each of the Areas listed below		12
The remaining three biology elective lectures may come from within these areas, or from any other 300- or 400-level elective courses in biology, and at least one must include a laboratory. A student enrolled in three semesters of BIO 301 Research Methods would fulfill this fourth laboratory requirement		10
Total Credits		22

ARea 1: Ecology and Evolution

Code	Title	Credits
BIO 305 & 305L	Medical Microbiology and its Ecological Basis and Medical Microbiology and its Ecological Basis Lab [1]	4
BIO 320 & 320L	Field Ecology and Field Ecology Lab	4
BIO 357 & 357L	Evolution and Evolution Lababoratory	4
BIO 375 & 375L	Community Ecology and Community Ecology Laboratory	4
BIO 377 & 377L	Freshwater Biology and Freshwater Biology Laboratory	4
BIO 378 & 378L	Wetlands and Wetlands Laboratory	4
BIO 406 & 406L	Population and Conservation Genetics and Population and Conservation Genetics Laboratory	4

[1] If BIO 305 taken in Area 1, then BIO 307 cannot be taken for Area 2.

AREA 2: Organismal Biology

Code	Title	Credits
BIO 307 & 307L	Microbiology and Microbiology Laboratory	4
BIO 314 & 314L	Comparative Anatomy of Vertebrates and Comparative Anatomy lab	4
BIO 316 & 316L	Social Organization of Mammals and Social Organization of Mammals Lab	4
BIO 324 & 324L	Human Anatomy and Human Anatomy Lab	4
BIO 335 & 335L	Plant Biology and Plant Biology Lab	4
BIO 340 & 340L	Physiology and Physiology Laboratory	4
BIO 343 & 343L	Entomology and Entomology Lab	4
BIO 366 & 366L	Ornithology and Ornithology Laboratory	4
BIO 370 & 370L	Plant Morphology and Plant Morphology Lab	4

Area 3: molecular and cellular biology

Code	Title	Credits
BIO 404 & 404L	Genetics and Genetics Laboratory	4
BIO 408 & 408L	Biotechnology, Theory in Practice and Biotechnology Lab	4
BIO 414 & 414L	Enzymes and Proteins and Enzymes and Proteins Laboratory	4
BIO 418 & 418L	Endocrinology and Endocrinology Laboratory	4
BIO 419 & 419L	Cell Biology and Cell Biology Laboratory	4
BIO 425 & 425L	Cellular Neurobiology and Cellular Neurobiology Laboratory	4
BIO 426 & 426L	Immunochemistry and Immunochemistry Laboratory	4
BIO 432 & 432L	Developmental Biology and Developmental Biology Laboratory	4
BIO 435 & 435L	Developmental Neurobiology and Develop Neurobiology Laboratory	4
BIO 450 & 450L	Molecular Biology and Molecular Biology Laboratory	4

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman

Fall	Spring
BIO 111 & 111L	BIO 112 & 112L

CHM 111 & 111L[1]	CHM 112 & 112L[1]
MAT (Calculus or Statistics)	MAT (Calculus or Statistics)
Sophomore	
Fall	**Spring**
BIO 211 & 211L	BIO 212 & 212L
CHM 227 & 227L	CHM 228 & 228L
	BIO 351
Junior	
Fall	**Spring**
PHY 201 & 201L	PHY 202 & 202L
BIO Elective with lab	BIO Elective with lab
Senior	
Fall	**Spring**
BIO Elective with lab	BIO Elective with lab
BIO Elective	BIO Elective
BIO 353	

[1] **Note:** For students who need additional math and or chemistry background, the combination of CHM 109 and CHM 110 can be taken in place of CHM 111. CHM 109 is taken in the fall of the freshman year, CHM 110 & CHM 111L are taken in the spring of the freshman year, and CHM 112 & CHM 112L are taken either in the summer or in the fall of the sophomore year concurrent with CHM 227 & CHM 227L.

Learning Goals & Objectives

Student Learning Goal 1

Students will develop competency with respect to knowledge, having a working understanding of basic concepts in the biological sciences.

Students will:

- Objective A: Demonstrate detailed knowledge within at least two areas of biology to be selected among the following: from ecology/evolutionary biology; molecular biology/cellular biology/biochemistry; physiology/organism biology;
- Objective B: Connect previously learned material with current research in biology.

Student Learning Goal 2

Students will develop problem solving skills applicable to the biological sciences.

Students will:

- Objective A: Accurately interpret data;
- Objective B: Design an experiment to address a specific hypothesis;
- Objective C: Critically analyze an article from the original scientific literature or a professional report.

Student Learning Goal 3

Students will demonstrate mastery with respect to technical skills in the biological sciences.

Students will:

- Objective A: Effectively communicate scientific material in a written format;
- Objective B: Effectively communicate scientific material orally;
- Objective C: Draw graphs or design tables to accurately represent scientific information;
- Objective D: Describe or Explain instrumentation and technology appropriate to their course of study.

Minors

The Biology Department offers six minors: General Biology, Cell and Molecular Biology, Environmental Biology, Neuroscience, Animal Behavior, and Zoo Biology. Students interested in the Cell and Molecular Biology, Environmental Biology, Neuroscience, or Biology minors should consult with the coordinator of that minor and their departmental advisor to plan the proper course selections. Students interested in the Animal Behavior and Zoo Biology minors should consult with Dr. Sue Margulis, Chair of the Animal Behavior, Ecology and Conservation (ABEC) department. A description of the Animal Behavior and Zoo Biology minors can be located within the ABEC pages (p. 83) of the college catalog. A description of the other minors are listed in the following text.

- General Biology Minor (for Non-Biology Majors) (p. 103)
- Cell and Molecular Biology Minor (p. 102)
- Environmental Biology Minor (p. 102)
- Neuroscience Minor (p. 103)

Courses

BIO 109 Nutrition **3 Credits**
How food intake influences us as individuals and as components of society, what food is, how we get and use food, processes regulating its use.
Fulfills College Core: Field 6 (Natural Sciences)

BIO 111 Introductory Biology I **3 Credits**
Introductory course for freshmen biology and other science majors. Course provides foundation of evolution, natural selection and heredity, and ecological principles as mechanisms of selection and evolution. Topics include the basis of evolutionary theory, concept of natural selection, evolution of living cells, basic inheritance, biological diversity, intra- and inter-specific interactions between organisms, and interactions between organisms and their environment. Three hours of lecture and a one and a half hour recitation per week.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: every fall.

BIO 111L Introductory Biology Laboratory I **1 Credit**
Laboratories in selection, heredity, diversity, population biology and ecology. Also includes introduction to scientific method and scientific writing. Three hours of lab per week.
Corequisite: BIO 111.
Offered: every fall.

BIO 112 Introductory Biology II **3 Credits**
Introductory course for freshmen biology and other science majors. Course focuses on homeostasis in multicellular organisms through exploring structure and function relationships in plants and animals. Topics include cell interactions in tissues and organs, anatomy and physiology of plants and animals, and the role of natural selection in shaping the anatomy and physiology of plants and animals. Three hours of lecture and a one and a half hour recitation per week.
Prerequisite: minimum grade of C- in BIO 111.
Offered: every spring.

BIO 112L Introductory Biology Laboratory II **1 Credit**
Laboratories that provide an examination of the structure and function of living organisms (plants and animals). Three hours of lab per week.
Corequisite: BIO 112.
Offered: every spring.

BIO 114 Human Biology: Introduction to Human Anatomy and Physiology **3 Credits**
Introductory course for those students requiring an understanding of the structure and function of the human body. Course examines the relationships among physiology, anatomy, metabolism, genetics, evolution, the physical environment, and exercise, and how they relate to diet, human health and disease. Three hours of lecture and one three-hour lab per week.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: fall & spring.

BIO 114L Human Biology: Introduction to Human Anatomy and Physiology Laboratory **1 Credit**
One three-hour lab per week.
Corequisite: BIO 114.
Offered: fall & spring.

BIO 115 Musculoskeletal Anatomy and Physiology **3 Credits**
Examination of the anatomy, physiology and biomechanical characteristics of the musculoskeletal components, and associated neural and vascular structures, of the human body. Three hours of lecture and one three-hour lab per week.
Prerequisite: minimum grade of C in BIO 114.
Offered: fall & spring.

BIO 115L Musculoskeletal Anatomy and Physiology Laboratory **1 Credit**
One three-hour lab per week.
Corequisite: BIO 115.
Offered: fall & spring.

BIO 116 Disease: Myth and Reality **3 Credits**
Exploration of causation, treatment and prevention of illness. Objective: to increase awareness and understanding of health and disease.
Fulfills College Core: Field 6 (Natural Sciences)

BIO 120 Biology in the News **3 Credits**
The biological concepts underlying science articles appearing in the current news media, examining these concepts in the context of relevant economic, social and cultural issues. Topics will vary.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: fall.

BIO 132 Genes and People **3 Credits**
How human characteristics are transmitted and affect future generations. Ethical and legal ramifications of genetic advances.
Fulfills College Core: Field 6 (Natural Sciences)

BIO 150 Animal Nutrition **3 Credits**
Nutrition and dietary science focused on the maintainance of wildlife in captivity. Practical examples at our local zoo and aquariums are included.

BIO 166 Biology of Birds **3 Credits**
An introduction to the diversity, behavior, anatomy, and physiology of birds. Students will learn how to identify common local birds. Topics include flight, songs and calls, finding mates, nesting behaviors, and migration. Three hours of lecture per week.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: occasionally.

BIO 199 Science Scholars Transfer Student Seminar **1 Credit**
Seminar course for first year BIO/ENV/ABEC transfer students to aid in integration into respective major. During the semester, we will review skill necessary for success in the major(s), discuss topics identified as missing/lacking from transferred introductory biology courses, and how to get involved in departmental activities (i.e. research, clubs, etc.). Course meets once a week (75 minutes) and will be scheduled around availability of participants, as possible. All Science Scholar Transfer students are required to take this course during the first year of their scholarship.
Restrictions: Canisius Science Scholar transfer scholarship recipient or permission of instructor.
Offered: every fall.

BIO 211 Biochemistry and Cell Biology I **3 Credits**
Fundamentals of biochemistry (biological chemistry) and cell biology for students majoring in the biological sciences. Structure and biological activities of proteins and lipids. Integrates the cellular and biochemical relationships between systems within the cell, with an emphasis on membrane transport, signal transduction, and cell motility. Three hours of lecture and a one and a half hour recitation per week.
Prerequisite: Minimum grade of C- in BIO 112 & CHM 112 or co-enrollment in CHM 112 with permission of Chair. **Corequisite:** BIO 211L.
Offered: every fall.

BIO 211L Biochemistry and Cell Biology Lab I **1 Credit**
Investigative laboratory provides opportunity for students to learn how to isolate, measure, and characterize macromolecules present within a variety of cellular systems. Three hours of lab per week.
Corequisite: BIO 211.
Offered: fall.

BIO 212 Biochemistry and Cell Biology II **3 Credits**
Fundamentals of biochemistry (biological chemistry) and cell biology for students majoring in the biological sciences. Structure and biological activities of carbohydrates and nucleic acids. Integrates the cellular and biochemical relationships between systems within the cell with an emphasis on the role cell communication, respiration, photosynthesis, gene expression, and cell division. Three hours of lecture and a one and a half hour recitation per week.
Prerequisite: minimum grade of C- in BIO 211 & CHM 112.
Offered: every spring.

BIO 212L Biochemistry and Cell Biology Lab II **1 Credit**
Examination of experimental methodologies that relate the expression and action of various macromolecules to biological processes at the cellular/molecular level. The role of experimentation in the scientific process is emphasized. Three hours of lab per week.
Prerequisite: BIO 211 & minimum grade of D in BIO 211L. **Corequisite:** BIO 212.
Offered: spring.

BIO 221 Biology of Women **3 Credits**
Biological principles applied to the human female. Structure, function, growth and development throughout the life cycle. Includes relevant social, psychological and medical information. Associated with Women's Studies Program.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: occasionally.

BIO 298 Pre-clinical Experience for Undergraduates **1 Credit**
Students undertake a substantial shadowing experience in a clinical setting. Must document and complete a minimum of 100 hours of voluntary work with the same clinician within the academic period. An academic component is also required. Student arranges contact with clinician. Application process is required.
Prerequisite: BIO 111, BIO 112, & approval of the department chair.
Offered: fall & spring.

BIO 300 Research Methods (non-credit) **0 Credits**
Training in experimental methods for the biological sciences under the direct supervision of a faculty member. Each section and research methodologies taught within the section unique to the instruction and research work of a specific faculty member. Requires approval of faculty member for enrollment into an individual section.
Offered: fall, spring, & summer.

BIO 301 Research Methods (credit) **1 Credit**
Training in experimental methods for the biological sciences under the direct supervision of a faculty member. Each section and research methodologies taught within the section unique to the instruction and research work of a specific faculty member. May be taken in multiple semesters for credit. Requires approval of faculty member for enrollment into an individual section.
Offered: fall, spring, & summer.

BIO 302 Science Scholars Seminar I: Research, Presentations, & Publishing **1 Credit**
Seminar course for students actively pursuing undergraduate research, or students planning on pursuing graduate research in the future. During the semester, we will discuss how to get involved in research lab, how to pursue independent research projects, how to seek research funding, how to present research (posters & oral presentations), and finally how to publish research results. Course meets once a week (75 minutes) and will be scheduled around availability of participants, as possible. All Science Scholars are required to take this course once during the three years of their scholarship.
Restrictions: Canisius College Science Scholar scholarship recipient or permission of instructor.
Offered: every spring.

BIO 303 Science Scholars Seminar II: Career Preparation, Applications, & Interviews **1 Credit**
Seminar course for students actively pursuing, or planning on pursuing graduate school or post-graduate employment in biology-related fields. During the semester, we will discuss how to identify potential graduate schools/employers, how to prepare application materials, and how to prepare for in-person interviews. Course meets once a week (75 minutes) and will be scheduled around availability of participants, as possible. All Science Scholars are required to take this course once during the three years of their scholarship.
Restrictions: Canisius Science Scholar scholarship recipient or permission of instructor.
Offered: every fall.

BIO 305 Medical Microbiology and its Ecological Basis **3 Credits**
Microbiology course that merges discussion of microbial interactions in the human environment (both beneficial and disease-causing) with discussion of microbial interactions in other natural environments. Topics include microbial & ecosystem diversity, the human microbiome compared to other microbial communities, human host-pathogen interaction compared to microbial competition in soil and water, and disease treatment compared to environmental bioremediation.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 305L Medical Microbiology and its Ecological Basis Lab **1 Credit**
Current and historical techniques for the isolation and measurement of microorganisms in the environment and for differentiation between medically important bacteria. Topics include microscopy, preparation of culture media and aseptic technique, staining of microorganisms, isolation and culture of specialized groups of bacteria from human, soil or aquatic environments, and determination of antibiotic resistance. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 305.

BIO 307 Microbiology **3 Credits**
Cell structure, genetics, biochemistry and physiology of microorganisms, with emphasis on bacteria. Medical microbiology, epidemiology, and some immunology also are discussed.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 307L Microbiology Laboratory **1 Credit**
Microbiology laboratory is concerned primarily with the cell structure, growth, physiology and identification of bacteria. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 307.

BIO 310 Histology and Histophysiology **4 Credits**
A systematic study of structure and function of cells and tissues as viewed by light microscopy. Lab employs tissue slides and digital images. Lab required. Three hours of lecture and one three-hour lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 312 Primatology **3 Credits**
Primatology is the scientific study of primates. Topics include primate evolution, behavior, ecology, and conservation. Emphasis will be placed on reading and critiquing primary literature.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Fulfills College Core: Advanced Writing-Intensive
Offered: every fall.

BIO 313 Embryology **4 Credits**
Emphasis will be on early developmental stages as seen in the invertebrate sea urchin and in the chordate animals, including human embryology. Establishment of the basic vertebrate body plan will be shown by classic models such as the frog, chick and pig. Specific embryological and anatomical knowledge will be gained through macro- and microscopic investigations and dissections. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 314 Comparative Anatomy of Vertebrates **4 Credits**
Evolution of chordates, with emphasis on comparative anatomic, functional, and developmental aspects of vertebrate organ systems. The laboratory portion will include dissection of vertebrate specimens including shark, amphibian, cat, and selected mammal organs. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 316 Social Organization of Mammals **3 Credits**
Behavior and social structures of rodents, felines, canines, cetaceans, elephants, monkeys, apes and humans. Laboratory includes observation of animal groupings at local zoos and aquariums. Three hours of lecture. Lab optional.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: fall 2016 and spring 2018.

BIO 316L Social Organization of Mammals Lab **1 Credit**
Observation of live animal groupings in local zoos and in the wild. Students acquire skills at hypothesis formation and data collection. May include additional fee.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 316.

BIO 317 Sex, Evolution and Behavior **3 Credits**
Reproductive behavior of diverse animal species, including humans, from an evolutionary perspective. Focus on how evolutionary accounts explain male-female differences in life style and behavior.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: spring 2017 and fall 2017.

BIO 320 Field Ecology **4 Credits**
Introduction to the flora, fauna and physical characteristics of regional terrestrial and aquatic ecosystems. Emphasis on field methods and implementation of scientific method from data collection, analysis, and data presentation. Introduction to Geographic Information System (GIS) and its applications in ecology. Lab required. Three hours of lecture and six hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: fall of even-numbered years.

BIO 322 Conservation Biology **3 Credits**
Study of the plight of endangered species, the biological consequences of fragmented populations, and the scientific basis of habitat/species restoration.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: every spring.

BIO 324 Human Anatomy **3 Credits**
A structure/function approach based on what was learned in BIO112, this course will allow the student to increase their conceptual understanding of human anatomy. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 324L Human Anatomy Lab **1 Credit**
Required lab for BIO 324.
Corequisite: BIO 324.

BIO 325 Reproductive Biopsychology **3 Credits**
Neuro-endocrine mechanisms underlying behavior associated with sex, pregnancy, and parental care. Equal focus on human and non-human behavior.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: fall of odd-numbered years.

BIO 335 Plant Biology **3 Credits**
Critical examination of the structure, physiology and biochemistry of vascular plants. The interaction of plants with light, water and predators is included. The plants' ability to grow in the face of global climate change is discussed.
Prerequisites: minimum grade of C- in BIO 111 & BIO 112.

BIO 335L Plant Biology Lab **1 Credit**
Investigative survey of plant structure and function. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 335.

BIO 340 Physiology **3 Credits**
Examination of the biochemical, molecular and cellular regulatory mechanisms involved in maintaining stable internal environments required for normal cell, tissue and organ function. Course focuses on cell and organ function, integrated physiological control systems for various organ systems (including cardiovascular, respiratory, GI, renal, reproductive, and immune), and the maintenance of homeostasis. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 340L Physiology Laboratory **1 Credit**
Experimental study of physiological systems, using biochemical, cellular and hematological techniques and electronic instrumentation. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 340.

BIO 343 Entomology **4 Credits**
Introduction to the diversity and natural history of insects. The structure, function, evolution and ecology of this group are emphasized. Laboratory focuses on anatomy, diversity and classification. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 345 Functional Neuroanatomy **3 Credits**
Examination of human neuroanatomy, with emphasis on the relationship between neuronal circuits and nervous system function/dysfunction. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 351 Biology Seminar I **1 Credit**
Designed to provide sophomore biology major students with the opportunity to learn various methods of preparing scientific/experimental information for oral presentation. Attendance at departmental seminars required. Meets for 1.5 hours per week.
Offered: every spring.

BIO 353 Biology Seminar II **1 Credit**
Provides opportunities for fourth-year Biology major students to present seminars on research of the primary biological literature. Attendance at departmental seminars required. Meets for 1.5 hours per week.
Prerequisite: BIO 351.
Fulfills College Core: Oral Communication
Offered: every fall.

BIO 355 Behavioral Neuroscience **3 Credits**
Functions of nervous and endocrine systems in mediating motivation, movement, sensation, ingestion, aggression, emotion, sleep, learning, memory, thought and behavior disorders.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: fall of even-numbered years.

BIO 357 Evolution **3 Credits**
An in-depth examination of the unifying principles of evolutionary biology. Pre-Darwin ideas about evolution, Darwinian evolution, the Modern Synthesis, and contemporary evolutionary biology. Specific concepts include, but are not limited to, population genetics, speciation, origin of life, phylogenetic analysis, with special emphasis on the evolution of sexual reproduction, virulence evolution, and human evolution. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 357L Evolution Laboratory **1 Credit**
Examination of fundamental evolutionary processes through a combination of laboratory experiments, simulations, and analysis of experimental data sets. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 357.
Offered: occasionally.

BIO 360 Environmental Health **3 Credits**
Environmental effects on human health, including biological, physical and chemical hazards in water soil, and air. Course focuses on public health and epidemiological study approaches. Emerging issues also discussed.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: Spring 2020.

BIO 364 Zoology: Diversity of Animal Life **3 Credits**
This course will explore differences in form, function, systematics and evolutionary relationships of the major groups of animal life on the planet. The course will focus on the evolution of major patterns in body plans and physiological adaptations of the major phyla within the animal kingdom.
Prerequisite: BIO 112.
Offered: fall.

BIO 364L Zoology: Diversity of Animal Life Laboratory **1 Credit**
This laboratory course will explore anatomical and physiological differences within and among taxonomic groups in the animal kingdom.
Corequisite: BIO 364.
Offered: fall.

BIO 366 Ornithology **4 Credits**
Diversity, relationships, ecology, natural history and the behavior of birds. Laboratory focuses on world-wide diversity, local species and field techniques. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: spring of odd-numbered years.

BIO 370 Plant Morphology **3 Credits**
Examination of plant morphology and the relationship between morphology, evolution, plant adaptation and plant biology is emphasized. Laboratory focuses on examining morphological features of local and non-local plants in a hands-on-setting. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112. **Corequisite:** BIO 370L.

BIO 370L Plant Morphology Lab **1 Credit**
Required lab for BIO 370.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 370.

BIO 375 Community Ecology **3 Credits**
Examination of how processes in multi-species assemblages affect communities by altering species' abundances, distributions, composition and driving long-term evolutionary change. Both theoretical models and empirical studies are used to illustrate concepts. Three hours of lecture per week.
Prerequisites: minimum grade of C- in BIO 111 & BIO 112.
Offered: occasionally.

BIO 375L Community Ecology Laboratory **1 Credit**
The laboratory reinforces ecological concepts discussed in lecture through computer simulations along with field- collected and experimental data. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 375.

BIO 377 Freshwater Biology **4 Credits**
Explores the biology of lakes, rivers, and wetlands. Lectures cover the main concepts in freshwater ecology, including the major physical, biological, and biogeochemical characteristics of freshwater environments. Lab required. The laboratory component covers field techniques, laboratory analyses and identification of common aquatic organisms. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 378 Wetlands **3 Credits**
Explores the plants, animals and environmental conditions that define wetland environments. The course covers the physical characteristics such as the soils and hydrology, the biological adaptations by plants and animals, and human interaction with these diverse and vibrant ecosystems.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.

BIO 378L Wetlands Laboratory **1 Credit**
Optional lab for Wetlands. Meets once a week for three hours.

BIO 400 Independent Study **1-3 Credits**
Independent study under the direction of a faculty member. Arrangements made prior to registration. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

BIO 401 Independent Research **1-4 Credits**
Independent laboratory research in biology conducted under the supervision of a faculty member. Arrangements made prior to registration.
Prerequisite: written permission of faculty member & department chair.

BIO 404 Genetics **3 Credits**
Principles of Mendelian, molecular, population, human and quantitative genetics, with emphasis on inherited diseases. Three hours of lecture and a one and a half hour of recitation per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 404L Genetics Laboratory **1 Credit**
Principles of Mendelian and molecular genetics as demonstrated by experiments with Drosophila and other experimental organisms. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 404.
Fulfills College Core: Advanced Writing-Intensive

BIO 406 Population and Conservation Genetics **3 Credits**
General introduction to the field of population genetics, the branch of evolutionary biology concerned with the genetic structure of populations and how it changes through time. We will examine the interaction of basic evolutionary processes (including mutation, natural selection, genetic drift, inbreeding, recombination, and gene flow), with special emphasis on their application to species conservation. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 406L Population and Conservation Genetics Laboratory **1 Credit**
Experimental studies designed to explore fundamental concepts in population genetics and their application in conservation. Laboratory is a combination of in vitro Drosophilaexperiments and in silico computer simulations/data analyses.
Prerequisite: minimum grade of D in BIO212L.

BIO 408 Biotechnology, Theory in Practice **4 Credits**
Introduction to the theory and experiments that are the foundation of biotechnology through lecture and laboratory. Topics include genetic engineering, mutagenesis, separation technology, immunobiotechnology and cell biology. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 212. **Corequisite:** BIO 408L.

BIO 414 Enzymes and Proteins **3 Credits**
The biochemical characteristics of proteins and enzymes will be examined using a modular approach to target important structural proteins and regulatory enzymes of animal and plant metabolism. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 414L Enzymes and Proteins Laboratory **1 Credit**
Experimental techniques for the purification of proteins, the analysis of protein function and the measurement of enzyme kinetics. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 414.

BIO 418 Endocrinology **3 Credits**
Synthesis and cellular/molecular actions of peptides and steroid hormones, growth factors, cytokines, and their roles in regulating physiological processes, maintenance of homeostasis and cancer biology. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 418L Endocrinology Laboratory **1 Credit**
Experimental laboratories researching current topics in endocrinology at the molecular, cellular and organismal levels. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 418.

BIO 419 Cell Biology **3 Credits**
In depth examination of cellular processes, including metabolism, motility, gene expression, protein processing and sorting, signal transduction, cell cycle, cell death, cell renewal and differentiation are discussed. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 419L Cell Biology Laboratory **1 Credit**
Experimental laboratories examining different cellular processes, including cytoskeleton, protein localization, and gene expression. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 419.

BIO 420 Phylogenetics **4 Credits**
Students will learn how to interpret what phylogenetic trees communicate about the evolution of a group of related species, how clues to the history of populations accumulate at the molecular level in DNA, and how statistical models based on this understanding allows us to build phylogenetic trees that reveal evolutionary history to us. Students will also understand how phylogenies allow us to test specific hypotheses concerning evolution.Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 420L Phylogenetics Laboratory **0 Credits**
Students will get firsthand experience generating genetic data, building phylogenies, and testing their own hypotheses. To accomplish this, students will work both at the lab bench and on the computer, using a number of programs to manipulate the data they generate. In short, this is a class where evolution, genetics, statistics, and computer science meet.
Prerequisite: minimum grade of D in BIO212L.

BIO 424 Epigenetics and Disease **3 Credits**
Epigenetic mechanisms alter how the genome is utilized and it is apparent that this changes between healthy and disease states and may start during development. This course focuses on the impact of environment influences on phenotype via epigenetic changes. Topics include cancer, metabolism and metabolic syndromes, autoimmune disorders and allergies. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 425 Cellular Neurobiology **3 Credits**
Cellular and molecular mechanisms underlying nervous system function. Topics include neuron/glia interactions, signaling within the nervous system, neuroplasticity, and neurodegeneration. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 425L Cellular Neurobiology Laboratory **1 Credit**
Experimental laboratories researching current topics in cell and molecular neurobiology. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 425.

BIO 426 Immunochemistry **3 Credits**
Structural concept of antigenic determinants, immunoglobulin sequences and combining site specificity related to the diversity of the immune response and its control. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 426L Immunochemistry Laboratory **1 Credit**
Current methods in immunological research and diagnosis. Designed to present available methodology and insight into the underlying principles. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 426.

BIO 430 Nutrition and Metabolism **3 Credits**
This course offers an in depth examination of cellular nutrition and metabolism. The function of vitamins and metals as essential players in energy generation, cell survival and human disease are discussed.
Prerequisite: minimum grade of C- in BIO 212.
Offered: spring 2018.

BIO 432 Developmental Biology **3 Credits**
A study of the basic principles that shape the development of a complex, multicellular organism from a single cell,with a particular emphasis being placed on the underlying cellular and molecular mechanisms. Relevant topics include fertilization, cell fate determination and differentiation, pattern formation, and organogenesis. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.
Fulfills College Core: Advanced Writing-Intensive
Offered: occasionally.

BIO 432L Developmental Biology Laboratory **1 Credit**
Examination of the cellular and molecular aspects of animal development using classical model organisms. Three hours of lab per week.
Prerequisite: BIO 211L & BIO 212L. **Corequisite:** BIO 432.

BIO 435 Developmental Neurobiology **3 Credits**
Cellular and molecular mechanisms underlying development of the nervous system and neurodevelopmental disorders. Topics include: neural induction, neurogenesis, migration, axon guidance, synaptogenesis, and regeneration. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 435L Develop Neurobiology Laboratory **1 Credit**
Experimental studies of the development and regeneration of nervous tissue using neuronal tissue culture and digital microscopy. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 435.

BIO 440 Medical Biochemistry **3 Credits**
Biochemistry of disease. Includes examination of pathways and regulatory enzymes that lead to normal and disease states. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 441 Neurobiology of Nervous System Disorders **3 Credits**
Cellular and molecular mechanisms under lying diseases of the nervous system, with an emphasis on emerging therapeutic approaches to treating diseases. Topics covered include: neurodegenerative diseases, neurodevelopmental disorders, infectious diseases, neuropsychiatric illnesses, stroke, and trauma. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 444 Cancer Biology 3 Credits
The causes of cancer, progression of the disease, and therapeutic approaches will be discussed. Students learn the common features of cancers as well as the distinguishing characteristics of a few specific cancers. Throughout the course therapeutic targets will be identified and novel therapeutic approaches will be discussed. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 450 Molecular Biology 3 Credits
This course focuses on genomes and nuclear organization and function. Topics include genome content and organization from an evolutionary perspective, epigenetic inheritance, chromatin structure and organization, somatic recombination, and organismal complexity. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.

BIO 450L Molecular Biology Laboratory 1 Credit
Experimental laboratories examining the regulation of gene expression and how regulation affects expression. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 450.

BIO 477 Plants and Society 3 Credits
Various ways in which plants affect human existence. Topics include food products, building (utilitarian) applications, medicinal and poisonous plants, propagation and improvement, roles in ecology. Open to students in any major. This course does not count for the biology major.
Fulfills College Core: Core Capstone

BIO 498 Biology With Distinction Thesis 3 Credits
Requirement for any student seeking to complete the Biology with Distinction degree option. Must be taken by seniors in the fall or spring of their senior year.

BIO 499 Biology Internship 3 Credits
Provides students with work experience in the biological sciences. Practical application of material taught in biology classes to the work environment. Requires an application and approval by the associate dean.
Prerequisite: permission of the department chair & associate dean.

Cell and Molecular Biology Minor

Coordinator: Lisa Morey, PhD

The Cell and Molecular minor is open to students majoring in biology or chemistry. For students seeking employment at the BS level, a Departmental "Letter of Proficiency in Laboratory Skills" may be requested upon completion of the minor. This letter requires enrollment in either BIO 300 or BIO 301.

Students must select **six courses** from the list below. At least three of the six courses must be taken with a laboratory. Please note that a student may choose to take 3 semesters of BIO 301 in lieu of one of the three required labs.

Code	Title	Credits
3 courses with labs [1]		12
3 additional courses (with or without labs)		9
Total Credits		21

[1] A student may choose to use 3 semesters of BIO 301 in lieu of one of the 3 required labs. In this case, the student would still need to take two courses with labs, 4 courses without labs, and 3 semesters of BIO 301 (for a total of 23 credits).

Cell and Molecular Elective Courses with Laboratories

Code	Title	Credits
BIO 404 & 404L	Genetics and Genetics Laboratory (lab optional)	4
BIO 408 & 408L	Biotechnology, Theory in Practice and Biotechnology Lab	4
BIO 414 & 414L	Enzymes and Proteins and Enzymes and Proteins Laboratory (lab optional)	4
BIO 418 & 418L	Endocrinology and Endocrinology Laboratory (lab optional)	4
BIO 419 & 419L	Cell Biology and Cell Biology Laboratory (lab optional)	4
BIO 425 & 425L	Cellular Neurobiology and Cellular Neurobiology Laboratory (lab optional)	4
BIO 426 & 426L	Immunochemistry and Immunochemistry Laboratory (lab optional)	4
BIO 432 & 432L	Developmental Biology and Developmental Biology Laboratory (lab optional)	4
BIO 435 & 435L	Developmental Neurobiology and Develop Neurobiology Laboratory (lab optional)	4
BIO 450 & 450L	Molecular Biology and Molecular Biology Laboratory (lab optional)	4

Cell and Molecular Elective Courses without Labs

Code	Title	Credits
BIO 424	Epigenetics and Disease	3
BIO 444	Cancer Biology	3
BIO 441	Neurobiology of Nervous System Disorders	3

Environmental Biology Minor

Coordinator: Katie Costanzo, PhD

The Environmental Biology minor is designed for students who want to focus on organismal biology, natural history, ecology and environmental science. It provides a broad preparation for entry into BS level positions in the environmental sciences and advanced study at the graduate level.

Requirements for the Environmental Biology Minor

The environmental biology minor requires BIO 320 (field ecology with its lab), at least one diversity class with its lab, and four additional upper-level biology classes, at least two of which must include the associated laboratory. Students may choose from the following classes:

Code	Title	Credits
BIO 320	Field Ecology	4
Diversity Course (must include its associated laboratory; see electives with footnote 1)		4
4 electives (two must include the associated laboratory)		14
Total Credits		22

Environmental Biology Electives

Code	Title	Credits
BIO 305	Medical Microbiology and its Ecological Basis [1]	3
BIO 320	Field Ecology (required of all students)	4

BIO 322	Conservation Biology	3
BIO 335	Plant Biology [1]	3
BIO 343	Entomology [1]	4
BIO 360	Environmental Health	3
BIO 366	Ornithology [1]	4
BIO 370	Plant Morphology [1]	3
BIO 375	Community Ecology	3
BIO 377	Freshwater Biology	4
BIO 378	Wetlands	3

[1] Fulfills the diversity requirement for this minor.

General Biology Minor (for non-biology majors)

Co-Coordinators: Robert Grebenok, PhD and Elizabeth Hogan, PhD

The biology minor may be earned by any student who completes the required courses. Co- and/or prerequisites for some of the required courses may effectively limit accessibility.

Code	Title	Credits
Required Courses		
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II	4
Elective Courses		
Select one elective at the 300 level with the associated lab		4
Select one elective at the 400 level with the associated lab		4
Total Credits		24

Neuroscience Minor

Coordinator: Elizabeth Hogan, PhD

The Neuroscience minor may be earned by any student who completes the required courses. Co- and/or prerequisites for some of the required courses may effectively limit accessibility.

Code	Title	Credits
Required course		
Take one of the following (the other may be used as an elective):		4
BIO 425 & 425L	Cellular Neurobiology and Cellular Neurobiology Laboratory	
BIO 435 & 435L	Developmental Neurobiology and Develop Neurobiology Laboratory	
Elective courses (take any 4):		12
BIO 325	Reproductive Biopsychology	
BIO 345	Functional Neuroanatomy	
BIO 355	Behavioral Neuroscience	
BIO 441	Neurobiology of Nervous System Disorders	
PSY 397	Neurobiology of Mental Disorders	
PSY 398	Neurobiology of Childhood Mental Disorders	
PSY 495	Guided Research in Psychology (if neuroscience-related)	
BIO 301	Research Methods (credit) (3 semesters required, must be neuroscience-related)	
Total Credits		16

Chemistry (BS)

Chair: Phillip M. Sheridan, PhD

Introduction

Chemistry or Biochemistry graduates enter a variety of professions, including careers in research and industry, the health professions, teaching, technical writing, business, sales, patent law and civil service. A major in chemistry or biochemistry is an excellent preparation for entrance into medical, dental and pharmacy schools. It also prepares students to enter a range of graduate programs including chemistry, biochemistry, biotechnology, bioinformatics, medicinal chemistry, chemical engineering, environmental science, bioengineering, business and law.

The Department of Chemistry and Biochemistry offers three tracks that lead to a BS degree in Chemistry and one track that leads to a BS degree in Chemistry with Business. The three tracks in Chemistry include the Chemistry track that is certified by the American Chemical Society (CHM ACS certified track), Chemistry Health Professions track, and Chemistry track designed for students who intend to pursue technical employment in industry. Chemistry with Business is designed for students who want to pursue administrative or sales careers in the chemical industry. It is also an excellent degree for students who what to pursue careers in patent law.

Advisors in the Department will help you choose the track that best fits your interests and career plans. Students in all program tracks will gain hands-on experience with a wide variety of modern, sophisticated laboratory instrumentation; this helps provide the experience necessary to be competitive in today's job market and/or to gain entrance into highly ranked graduate programs.

All Chemistry tracks can be completed with a business minor. This option provides a very useful preparation for employment in sales, marketing, or other industrial professions, as well as preparing students for graduate studies in business or administration

Please go to the Chemistry and Biochemistry website (https://www.canisius.edu/academics/programs/chemistry-and-biochemistry/) for a more detailed description of the program, faculty, facilities, and academic and co-curricular opportunities.

Qualifications

Students must attain the grade of C or greater in General Chemistry II (CHM 112) and C- or greater in Organic Chemistry II (CHM 228) in order to progress into the major. Several two-semester courses (CHM 111 and CHM 112, CHM 227 and CHM 228, BCH 301 and BCH 302) have a requirement for a minimum grade of C- in the first course to continue with the second course.

Advisement

All students have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Students who are still deciding on a major should go the the Griff Center for Academic Engagement for advisement including course selection prior to

registration. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Special Programs Offered by the Department

Early Assurance Program with University at Buffalo Medical School or Syracuse Medical School

Qualified students may apply to the University at Buffalo Medical School or Syracuse University Medical School during their sophomore year. Those accepted will be admitted into the Medical School freshman class after their graduation from Canisius.

Early Assurance Program with University at Buffalo Dental School

Qualified students may apply to the University at Buffalo Dental School during their sophomore year. Those accepted will be admitted into the Dental School freshman class after their graduation from Canisius.

Pre-Medical and Pre-Dental

The Chemistry and Biochemistry BS degrees are excellent preparations for entering into medical and dental schools, and a third of the graduates from this Department typically enter into these programs. Students applying to medical or dental schools must take the Medical College Admission Test (MCAT) or Dental Admission Test (DAT).

Pre-Pharmacy

For pre-pharmacy students we recommend the CHM Health Professions track, since students in this track can meet all pharmacy school entrance requirements. Students applying to most pharmacy schools must take the Pharmacy College Admission Test (PCAT).

Major Experiences

Following their freshman year, and sometimes earlier, chemistry and biochemistry majors are encouraged to become involved in research or other professional projects. Stipends for qualified students are often available so that work can be done on these projects during the summer and school year in the Department. Summer work in industrial laboratories and research institutions is also available. Our close relationship with local industries and institutions aids students in job placement before and after graduation. Students may also choose to undertake industrial internships for advanced elective course credit.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

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All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements For ACS-certified Chemistry Track

The ACS-certified Chemistry track is recommended for students intending advanced study (pursuing a graduate degree) in Chemistry.

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory	4
CHM 244	Inorganic Chemistry	3
CHM 301 & 301L	Fundamental Physical Chemistry and Fundamental Physical Chemistry Laboratory	4
CHM 302 & 302L	Modern Physical Chemistry and Modern Physical Chemistry Laboratory	4
CHM 334 & 334L	Spectrometric Analysis and Spectrometric Analysis Lab	4
CHM 420 & 420L	Materials Chemistry and Materials Chemistry Laboratory	4
CHM 430 & 430L	Instrumental Analytical Chemistry and Instrumental Analytical Chemistry Laboratory	4

CHM 381	Scientific Literature and Communication	1
CHM 480	Communicating Concepts in Chemistry	1
CHM 481	Communicating Research Literature	1
Choose 2 Chemistry or Biochemistry Electives (any 300- or 400- level CHM or BCH course) [1]		6
BCH 301	Introduction to Biochemistry	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
MAT 111	Calculus I	4
MAT 112	Calculus II	4
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
Total Credits		75

[1] Students may use PHY 332 or PHY 226 with lab as a Chemistry Elective.

For Chemistry Track

Chemistry track designed for students who intend to pursue technical employment in industry.

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory	4
CHM 244	Inorganic Chemistry	3
CHM 301 & 301L	Fundamental Physical Chemistry and Fundamental Physical Chemistry Laboratory	4
CHM 334 & 334L	Spectrometric Analysis and Spectrometric Analysis Lab	4
CHM 430 & 430L	Instrumental Analytical Chemistry and Instrumental Analytical Chemistry Laboratory	4
CHM 381	Scientific Literature and Communication	1
CHM 480	Communicating Concepts in Chemistry	1
CHM 481	Communicating Research Literature	1
Choose 3 Chemistry or Biochemistry Electives (any 300- or 400- level CHM or BCH course) [1]		9
BCH 301	Introduction to Biochemistry	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
MAT 111	Calculus I	4
MAT 112	Calculus II [2]	4
or MAT 141	Inferential Statistics and Computers for Science	
PHY 201 & 201L	College Physics I and College Physics I Laboratory	4
PHY 202 & 202L	College Physics II and College Physics II Laboratory	4
Total Credits		70

[1] Students may use PHY 332 or PHY 226 with lab as a Chemistry Elective.

[2] Students minoring in business may take ECO 255 in lieu of MAT 112 or MAT 141.

For Chemistry for Health Professions Track

The Health Professions Track is recommended for students preparing for a health-related profession (e.g. Medicine, Dentistry, Physician Assistant, etc.).

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory	4
CHM 244	Inorganic Chemistry	3
CHM 301	Fundamental Physical Chemistry	3
CHM 381	Scientific Literature and Communication	1
CHM 480	Communicating Concepts in Chemistry	1
CHM 481	Communicating Research Literature	1
Choose a Chemistry or Biochemistry Elective (any 300- or 400- level CHM or BCH course) with lab		4
Science Elective (choose from CSC 111 or any 300- or 400-level course in CHM, BCH, BIO, or PHY)		3
Science Elective with Lab (choose any 300- or 400-level course in CHM, BCH, BIO, or PHY)		4
BCH 301	Introduction to Biochemistry	3
BCH 302	Cellular Biochemistry	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
MAT 111	Calculus I	4
MAT 112	Calculus II [1]	4
or MAT 141	Inferential Statistics and Computers for Science	
PHY 201 & 201L	College Physics I and College Physics I Laboratory [2]	4
PHY 202 & 202L	College Physics II and College Physics II Laboratory [2]	4
Total Credits		70

[1] Students minoring in business may take ECO 255 in lieu of MAT 112 or MAT 141.

[2] Students may take the PHY 223, PHY 223L and PHY 224, PHY 224L in lieu of this sequence.

For Chemistry with Business Track

Chemistry with Business is designed for students who want to pursue administrative or sales careers in the chemical industry. It is also an excellent degree for students who what to pursue careers in patent law.

Code	Title	Credits
Required Science Courses		
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
CHM 301	Fundamental Physical Chemistry	3
Choose one of the following:		4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory	
CHM 232 & 232L	Environmental Analytical Chemistry and Environmental Analytical Chemistry Laboratory	
CHM 334 & 334L	Spectrometric Analysis and Spectrometric Analysis Lab	
CHM 430 & 430L	Instrumental Analytical Chemistry and Instrumental Analytical Chemistry Laboratory	
Choose a Chemistry or Biochemistry Elective (any 300- or 400- level CHM or BCH course)		3
CHM 381	Scientific Literature and Communication	1
CHM 480	Communicating Concepts in Chemistry	1
BCH 301 & 301L	Introduction to Biochemistry and Introduction to Biochemistry Laboratory	4
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
MAT 111	Calculus I	4
MAT 112	Calculus II [1]	4
or MAT 141	Inferential Statistics and Computers for Science	
PHY 201 & 201L	College Physics I and College Physics I Laboratory	4
PHY 202 & 202L	College Physics II and College Physics II Laboratory	4
Required Business Courses		
ECO 101	Principles of Macroeconomics	3
MGT 101	Introduction to Management	3
MKT 201	Principles of Marketing	3
ACC 201	Financial Accounting	3
FIN 201	Introduction to Corporate Finance	3
Major Electives		
Select two courses in business, law, or science [2]		6
Total Credits		77

1. Students in this track may take ECO 255 in lieu of MAT 112 or MAT 141.
2. Choose two courses from the following: CSC 111, IBUS 301, PSC 320, PSC 321, ACC 202, ECO 102, any 200-level or higher ECO course, or any 300- or 400-level course in CHM, BCH, BIO, PHY, MGT, or MKT.

Additional Course Considerations

MAT 211 is highly recommended for students interested in pursuing a PhD degree. In addition, MAT 219 and MAT 222 are highly recommended for students interested in pursuing a PhD degree in physical, inorganic, or analytical chemistry.

Roadmap

Recommended Semester Schedule for Major Course Requirements

CHM ACS Certified Track

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	PHY 223 & 223L
MAT 111	MAT 112

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 224 & 224L	CHM 230 & 230L
CHM 244	

Junior

Fall	Spring
CHM 301 & 301L	CHM 302 & 302L
CHM 381	CHM 430 & 430L
CHM 420 & 420L	CHM 480

Senior

Fall	Spring
CHM 334 & 334L	CHM Elective
BCH 301	CHM Elective
CHM 481	

CHM ACS Certified Track with Business Minor

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	PHY 223 & 223L
MAT 111	MAT 112

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 224 & 224L	CHM 230 & 230L
ECO 101	ECO 102
CHM 244	MAT 141 or ECO 255

Junior

Fall	Spring
CHM 301 & 301L	CHM 302 & 302L
CHM 381	CHM 430 & 430L
CHM 420 & 420L	CHM 480
MKT 201	MGT 101

Senior

Fall	Spring
CHM 334 & 334L	CHM Elective
BCH 301	CHM Elective
CHM 481	FIN 201
ACC 201	

CHM Track

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	MAT 112 or 141
MAT 111	

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L

Junior

Fall	Spring
BCH 301	CHM 230 & 230L
CHM 244	CHM Elective
CHM 381	CHM 480

Senior

Fall	Spring
CHM 301 & 301L	CHM 430 & 430L
CHM 334 & 334L	CHM Elective
CHM 481	CHM Elective

CHM Track with Business Minor

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	MAT 141 or ECO 255
MAT 111	

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L
	ECO 102

Junior

Fall	Spring
BCH 301	CHM 230 & 230L
CHM 244	CHM Elective
CHM 381	CHM 480
ECO 101	MGT 101

Senior

Fall	Spring
CHM 301 & 301L	CHM 430 & 430L
CHM 334 & 334L	CHM Elective
CHM 481	CHM Elective
ACC 201	FIN 201
MKT 201	

CHM Health Professions Track

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 112 or 141

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L

Junior

Fall	Spring
BCH 301	CHM 230 & 230L
CHM 244	BCH 302
CHM 381	CHM 480

Senior

Fall	Spring
CHM 301	CHM Elective + Lab
CHM 481	SCI elective
SCI Elective + Lab	

CHM Health Professions Track with Business Minor

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 141 or ECO 255

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L
ECO 101	ECO 102

Junior

Fall	Spring
BCH 301	CHM 230 & 230L
CHM 381	BCH 302
CHM 244	CHM 480
MKT 201	MGT 101

Senior

Fall	Spring
CHM 301	CHM Elective + Lab
CHM 481	SCI Elective
ACC 201	FIN 201
SCI Elective + Lab	

CHM with Business Track

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 141 or 112

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L
ECO 101	MGT 101

Junior

Fall	Spring
BCH 301 & 301L	CHM 480
CHM 381	Major Elective[2]
ACC 201	Analytical/Instrumental Chemistry with lab[1]
MKT 201	

Senior

Fall	Spring
CHM 301	BCH or CHM Elective
FIN 201	Major Elective

1 Choose one of the following analytical/instrumental courses with its associated laboratory: CHM 230, CHM 232, CHM 334, or CHM 430.

2 Choose two courses in business, law, or science: a 300 level course or higher in MGT, ACC 202, ECO 102 or a 200 level course or higher in ECO, IBUS 301, PSC 320, PSC 321, a 300 or 400 level course in CHM, BCH, BIO, or PHY, or CSC 111.

Learning Goals & Objectives

Student Learning Goal 1:

Knowledge; Department majors will demonstrate an understanding of fundamental chemical concepts.

Students will:

- Objective A (Concepts): Demonstrate broad knowledge of chemical concepts;
- Objective B (Reactions): Predict and analyze the effects of chemical changes;
- Objective C (Derivations): Manipulate expressions of chemical quantities to derive higher-order relationships;
- Objective D (Safety): Demonstrate knowledge of chemical, instrumental and workplace safety.

Student Learning Goal 2:

Professional Skills; Department majors will be able to work effectively in a professional or laboratory setting.

Students will:

- Objective A (Scientific Literacy): Identify, access and use chemical literature sources;
- Objective B (Scientific Method): Define chemical problems, then formulate hypotheses and design experiments to address them;
- Objective C (Laboratory Skills): Carry out experiments (follow directions, manipulate materials and lab apparatus, record data);
- Objective D (Laboratory Instrumentation): Use modern instrumentation (prepare samples, operate systems, troubleshoot common problems, organize and label data).

Student Learning Goal 3:

Communication; Department majors will be proficient in the communication of chemical information.

Students will:

- Objective A (Oral Communication): Construct and deliver an effective oral presentation;
- Objective B (Written Communication): Write an effective, properly formatted scientific report.

Minor

Students majoring in various disciplines such as biology, mathematics, physics, bioinformatics, computer science, psychology and business can benefit from pursuing a minor in chemistry. The chemistry minor requires a student to complete the following sequence of courses:

Code	Title	Credits
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
Select one of the following:		4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory	
CHM 334 & 334L	Spectrometric Analysis and Spectrometric Analysis Lab	
CHM 430 & 430L	Instrumental Analytical Chemistry and Instrumental Analytical Chemistry Laboratory	
Select one of the following:		3
CHM 244	Inorganic Chemistry	
CHM 301	Fundamental Physical Chemistry	
Select one of the following:		3-4
CHM or BCH 300- or 400-level course		
Total Credits		26-27

Courses

CHM 104 Energy, Environment, and Society **3 Credits**
Designed to provide a better understanding of energy and our environment, including man's interaction with his environment and the consequences facing society today. This course satisfies the goals and objectives of Field 6, Natural Sciences.
Fulfills College Core: Field 6 (Natural Sciences), Global Awareness
Offered: every fall.

CHM 109 General Chemistry I with Review - Part I **3 Credits**
General Chemistry I for science majors, Part I, three lectures and one recitation per week. This course reviews some mathematical concepts, emphasizes dimensional analysis, nomenclature, stoichiometry, solutions, basic chemical reactions, and thermochemistry. This course satisfies the goals and objectives of Field 6, Natural Sciences.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: every fall.

CHM 110 General Chemistry I with Review - Part II **3 Credits**
General Chemistry I for science majors, Part II, three lectures, one laboratory, and one recitation per week. This course emphasizes atomic and molecular structure, periodic properties, gas laws, and states of matter. The CHM 109 and CHM 110 sequence is equivalent to CHM 111 and a free elective. Students completing the CHM 109 and CHM 110 sequence are eligible to take CHM 112 in the fall of their sophomore year or during the summer. A minimum grade of C- in CHM 110 is required for both CHM 112 (General Chemistry II) and CHM 227 (Organic Chemistry I).
Prerequisite: minimum grade of C- in CHM 109. **Corequisite:** CHM 111L.
Offered: every spring.

CHM 111 General Chemistry I **3 Credits**
General Chemistry I for science majors. This course is recommended for students with a very good background in mathematics and significant exposure to high school chemistry. Chemical nomenclature, stoichiometry, solutions, basic chemical reactions, thermochemistry, atomic and molecular structure, periodic properties, gas laws, and states of matter. A minimum grade of C- in CHM 111 is a prerequisite for both CHM 112 (General Chemistry II) and CHM 227 (Organic Chemistry I). Three lectures and one recitation per week.
Prerequisite: minimum score of 580 in MSAT or permission of instructor.
Corequisite: CHM 111L.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: every fall.

CHM 111L General Chemistry I Laboratory **1 Credit**
Covers techniques of measurements, decantation, and filtration; use of a data acquisition system with temperature probe, pressure sensor, and spectrophotometer; analysis of data and developing a conclusion based on data trends. One three-hour lab per week.
Corequisite: CHM 110 or CHM 111.
Offered: every fall.

CHM 112 General Chemistry II **3 Credits**
General Chemistry II for science majors. Properties of solutions (including colligative properties), kinetics, chemical equilibrium concepts, calculations involving acid/base and precipitation equilibria, thermodynamics (second and third law), electrochemistry, nuclear chemistry, and chemistry of the environment. A minimum grade of C in CHM 112 is required for all chemistry and biochemistry majors. Three lectures and one recitation per week.
Prerequisite: minimum grade of C- in either CHM 110 or CHM 111.
Corequisite: CHM 112L.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: every fall & spring.

CHM 112L General Chemistry II Laboratory **1 Credit**
Builds on techniques developed in CHM 111L and covers solution dilution, titration, pipetting, and use of a pH electrode and current probe. One three-hour lab per week.
Prerequisite: minimum grade of C- in CHM 111L. **Corequisite:** CHM 112.
Offered: every fall & spring.

CHM 227 Organic Chemistry I **3 Credits**
Fundamental treatment of organic chemistry. Bonding, structure, nomenclature, and stereochemistry of organic functional groups. Mechanisms and reactivity in substitution and elimination reactions. Three lectures and one recitation per week.
Prerequisite: minimum grade of C- in either CHM 110 or CHM 111.
Corequisite: CHM 227L.
Offered: every fall.

CHM 227L Organic Chemistry I Laboratory **1 Credit**
One four-hour lab per week. Techniques for synthesis, separation, purification, and analysis of organic compounds.
Prerequisite: minimum grade of C- in CHM 111L. **Corequisite:** CHM 227.
Offered: every fall.

CHM 228 Organic Chemistry II **3 Credits**
Continuation of organic chemistry. Chemistry and reaction mechanisms of unsaturated compounds, and oxygen and nitrogen-containing functional groups. Introduction to the organic chemistry of carbohydrates, lipids and peptides. Three lectures and one recitation per week.
Prerequisite: minimum grade of C- in CHM 227. **Corequisite:** CHM 228L.
Offered: every spring.

CHM 228L Organic Chemistry II Laboratory **1 Credit**
One four hour lab per week. Expands on techniques for synthesis, separation, purification, and analysis of organic compounds.
Prerequisite: minimum grade of C- in CHM 227L. **Corequisite:** CHM 228.
Offered: every spring.

CHM 230 Analytical Chemistry **3 Credits**
Principles and methodology of modern analytical chemistry presented with particular emphasis on statistical error analysis, titrations, solution equilibrium, and potentiometry. Three lectures and one recitation per week.
Prerequisite: minimum grade of C in CHM 112. **Corequisite:** CHM 230L.
Offered: every spring.

CHM 230L Analytical Chemistry Laboratory **1 Credit**
One four-hour lab per week. Fundamental techniques of quantitative analysis including titrations in multiple reaction paradigms, potentiometry, absorption spectrometry, and separation technologies.
Prerequisite: minimum grade of C- in CHM 112L. **Corequisite:** CHM 230.
Offered: every spring.

CHM 232 Environmental Analytical Chemistry **3 Credits**
Environmental applications of analytical chemistry. Sampling techniques and statistical analysis of data. Soil chemistry, aquatic chemistry and atmospheric chemistry. Trace analysis with electroanalytical, liquid and gas chromatography, atomic absorption spectroscopy and ion selective electrodes. Three lectures and one recitation per week.
Prerequisite: CHM 112. **Corequisite:** CHM 232L.
Offered: anticipated spring 2020.

CHM 232L Environmental Analytical Chemistry Laboratory **1 Credit**
One four-hour lab per week.
Prerequisite: CHM 112L. **Corequisite:** CHM 232.
Offered: spring 2018.

CHM 244 Inorganic Chemistry **3 Credits**
Electronic configuration of atoms, periodic classification of the elements, nature of chemical bonding, symmetry and application of group theory to molecular orbitals, structures and thermodynamics of solids, bonding in metals and semiconductors, acid/base concepts, electrochemistry, isomerism, bonding, reactions and spectroscopy of coordination compounds, and other aspects of modern inorganic chemistry. Three lectures and one recitation per week.
Prerequisite: minimum grade of C in CHM 112.
Offered: every fall.

CHM 301 Fundamental Physical Chemistry **3 Credits**
Fundamental topics in thermodynamics, kinetics, and quantum chemistry. Three lectures and one recitation per week.
Prerequisite: minimum grade of C in CHM 112, successful completion of MAT 111 or MAT 110, and a year of physics (PHY 201 & PHY 202 or PHY 223 & PHY 224).
Offered: every fall.

CHM 301L Fundamental Physical Chemistry Laboratory **1 Credit**
Selected experiments demonstrating principles of thermodynamics and chemical kinetics. One four-hour lab per week.
Prerequisite: minimum grade of C in CHM 230L & C in CHM 301 (or cuncurrent registration in CHM 301).
Fulfills College Core: Advanced Writing-Intensive
Offered: every fall.

CHM 302 Modern Physical Chemistry **3 Credits**
Introduction to quantum chemistry with applications to the structure of atoms and molecules. Molecular spectroscopy. Three lectures and one recitation per week.
Prerequisite: minimum grade of C in CHM 112, successful completion of MAT 111 or MAT 110; MAT 112; and a year of physics (PHY 201 & PHY 202 or PHY 223 & PHY 224).
Offered: every spring.

CHM 302L Modern Physical Chemistry Laboratory **1 Credit**
Selected spectroscopy experiments with applications to molecular structure. One four-hour lab per week.
Prerequisite: CHM 302 (or concurrent registration in CHM 302) & minimum grade of C in CHM 230L, CHM 301L, CHM 334L or CHM 430L.
Offered: every spring.

CHM 334 Spectrometric Analysis **3 Credits**
Spectrometric methods for the elucidation of chemical structures. Includes nuclear magnetic resonance, infrared, ultraviolet and mass spectrometry. Emphasis on organic compounds. Three lectures per week.
Prerequisite: CHM 228.
Offered: every fall.

CHM 334L Spectrometric Analysis Lab **1 Credit**
One four-hour lab per week. Nuclear magnetic resonance, infrared, ultraviolet and mass spectrometry of organic compounds.
Prerequisite: CHM 228L.
Offered: every fall.

CHM 338 Intermediate Organic Chemistry **3 Credits**
Important basic concepts in organic chemistry are reviewed at a higher level than is possible in the introductory courses. New concepts are presented in the areas of reaction mechanisms, frontier molecular orbitals, physical organic chemistry, and in stereoelectronic effects.
Prerequisite: CHM 228.
Offered: fall 2019.

CHM 344 Metal Ions in Biological Systems **3 Credits**
Chemical processes in biological systems, which include participation of metal ions, are covered. The course begins with the principles of coordination chemistry and structural biochemistry. The rest of the course is organized according to the functions performed by the metal centers: gene expression and signal transduction, digestion, bioenergetics and electron transfer, oxygen transport, liver functions and anticancer drugs.
Prerequisite: CHM 228.
Offered: occasionally in spring.

CHM 381 Scientific Literature and Communication **1 Credit**
First of three student-faculty seminars for majors. Introduces scientific literature, technical writing and oral communication in chemistry and allied fields.
Prerequisite: CHM 228 & junior standing.
Offered: every fall.

CHM 401 Modern Synthetic Methods **3 Credits**
Structure-reactivity relationships in organometallic chemistry and the application of organometallic compounds in organic synthesis, including industrial catalysis.
Prerequisite: CHM 228 & CHM 244.
Offered: occasionally in spring.

CHM 401L Modern Synthetic Methods Laboratory **1 Credit**
Designed to illustrate some of the most important synthetic and physical techniques used by modern synthetic chemists.
Prerequisite: CHM 401 (or concurrent registration).
Offered: occasionally in spring.

CHM 402 Advanced Physical Chemistry **3 Credits**
Introduction to statistical thermodynamics. Applications of group theory to chemical bonding and molecular spectroscopy. Angular momentum coupling in atomic and molecular spectroscopy. Three lectures per week.
Prerequisites: MAT 111 & MAT 112; CHM 244; CHM 302 (may be taken concurrently); and either PHY 201 & PHY 202 or PHY 223 & PHY 224.
Offered: Occasionally in spring.

CHM 420 Materials Chemistry **3 Credits**
A survey of topics and applications in modern materials chemistry including solid state materials, semiconductors, polymers, nanomaterials, and introductions to mechanical properties, device fabrication, and structure-activity relationships.
Prerequisite: CHM 228 & CHM 244 (or concurrent registration in CHM 244). **Corequisite:** CHM 420L.
Offered: anticipated fall 2020 (please consult with department).

CHM 420L Materials Chemistry Laboratory **1 Credit**
This laboratory develops concepts introduced in the lecture component of Materials Chemistry, CHM420, including solid-state structure, mechanical properties, semiconductors, polymers, and nanomaterials. The lab meets for four hours per week.
Prerequisite: CHM 228L (may be taken concurrently). **Corequisite:** CHM 420.
Offered: anticipated fall 2020 (please consult with department).

CHM 430 Instrumental Analytical Chemistry **3 Credits**
Advanced instrumental methods of analysis including spectroscopy, chromatography and various electrochemical techniques. Three lectures per week.
Prerequisite: CHM 112 & CHM 228 (or concurrent registration in CHM 228).
Offered: spring of odd-numbered years.

CHM 430L Instrumental Analytical Chemistry Laboratory **1 Credit**
One four-hour lab per week. Atomic absorption spectroscopy, chromatography and various electrochemical techniques
Prerequisite: CHM 112L & CHM 228L (or concurrent registration in CHM 228L). **Corequisite:** CHM 430.
Offered: spring of odd-numbered years.

CHM 450 Research in Chemistry **3 Credits**
Independent research under the direction of the chemistry faculty. Students are required to spend 9 hours per week conducting research. CHM 450 may be taken in place of a chemistry elective without lab. Research and consultation times to be arranged after approval of department chair.
Prerequisite: permission of department chair.
Offered: fall & spring.

CHM 451 Research in Chemistry **4 Credits**
Independent research under the direction of the chemistry faculty. Students are required to spend 12 hours per week conducting research. CHM 451 may be taken in place of a chemistry elective with lab. Research and consultation times to be arranged after approval of department chair.
Prerequisite: permission of department chair.
Offered: fall & spring.

CHM 455 Medicinal Chemistry **3 Credits**
Chemical principles are used to explain the interaction of drugs with biological targets. Strategies used in the design and development of medicines are discussed.
Prerequisite: minimum grade of C- in both CHM 228 & BCH 301.
Offered: spring 2019.

CHM 480 Communicating Concepts in Chemistry **1 Credit**
Second of three student-faculty seminars for majors. Students give a 25-minute presentation on an advanced coursework topic. Emphasis is placed on the process and the mechanics of constructing a scientific talk.
Prerequisite: CHM 228, CHM 381, & junior standing.
Offered: every spring.

CHM 481 Communicating Research Literature **1 Credit**
Third of three student-faculty seminars for majors. Students give a 45-minute presentation on a scientific work from the chemical literature. Emphasis is placed on constructing a narrative and gaining a working understanding of the scientific issues in the presented paper.
Prerequisite: CHM 228, CHM 381, & junior standing.
Fulfills College Core: Oral Communication
Offered: every fall.

CHM 490 Chemistry Internship **3 Credits**
Internships in chemical or biochemical industry under the direction of company and faculty supervisors.
Prerequisite: permission of department chair & associate dean.
Offered: fall & spring.

CHM 499 Independent Study **3-4 Credits**
Independent study under the direction of the chemistry faculty. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: fall & spring.

Classics (BA)

Chair: Kathryn Williams (willia94@canisius.edu), **PhD**

Introduction

The Classics major at Canisius is designed to accommodate students interested in both ancient Greek and Roman culture. We offer three tracks of study: Greek Language and Hellenic Studies (CLSG), Latin Language and Roman Studies (CLSL), and Classical Studies (CLSS). Please see the Classics website (https://www.canisius.edu/academics/programs/classics/) for a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities.

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Classics.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Major Experiences

Classics majors are encouraged to become members of the Canisius Classics Club and to attend the weekly departmental Classics Tea@2. Majors are also encouraged to participate in events sponsored by the Institute for Classical and Medieval Studies (https://blogs.canisius.edu/icms/). Exceptional majors

will be invited to become members of Eta Sigma Phi, the national Classics Honor Society.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

A major in Classics is a perfect complement to majors in a broad range of disciplines — particularly Art History, Creative Writing, English, European Studies, History, Modern Languages, Political Science, Philosophy, and Religious Studies — and an excellent second major for students interested in careers in law or medicine.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
All Classics Majors		
CLS 103	Greek History	3
or CLS 104	Roman History	
CLS 205	Ancient Greece: Culture and Society	3
or CLS 206	Ancient Rome: Culture and Society	
Tracks		
Select one of the following:		30
Greek Language and Hellenic Studies Track/CLSG		
Latin Language and Roman Studies Track/CLSL		
Classical Studies Track/CLSS		
Total Credits		36

Greek Language and Hellenic Studies Track/CLSG

Code	Title	Credits
6 Classical Greek (CLG) courses (at least 6 credits at the 300 level or above)		18
4 Major electives (no more than two may be Interdepartmental)		12
Total Credits		30

Latin Language and Roman Studies Track/CLSL

Code	Title	Credits
6 Latin (CLL) courses (at least 6 credits at the 300 level or above)		18
4 Major electives (no more than two may be Interdepartmental)		12
Total Credits		30

Classical Studies Track/CLSS

Code	Title	Credits
4 Classical Greek (CLG) OR 4 Latin (CLL) courses (at least 6 credits at the 200 level or above)		12
6 Major electives (no more than two may be Interdepartmental)		18
Total Credits		30

Major Electives

Any CLG, CLL, or CLS course not used as a required course within the major may serve as a Classics elective.

Departmental Electives

Code	Title	Credits
CLG 101	Elementary Greek I [1]	3
CLG 102	Elementary Greek II [1]	3
CLG 203- CLG 218 [1]		3
CLG 306- CLG 318 [1]		3
CLG 400	Paideia [1]	3
CLL 101	Elementary Latin [2]	3
CLL 102	Elementary Latin II [2]	3
CLL 201- CLL 218 [2]		3
CLL 301- CLL 318 [2]		
CLL 400	Humanitas	3
CLS 103	Greek History	3
CLS 104	Roman History	3
CLS 205	Ancient Greece: Culture and Society	3
CLS 206	Ancient Rome: Culture and Society	3
CLS 207	Mythology and Literature	3
CLS 209	Greek and Roman Archaeology	3
CLS 211	Archaeology of Pompeii	3
CLS 212	Borders, Walls, and Immigrants in the Ancient World	3
CLS 214	Greek and Roman Tragedy	3

CLS 219	Animals in the Ancient World	3
CLS 220	Greek and Latin Roots of Medical Terminology	3
CLS 300	Roman Law and Society	3
CLS 301	Culture and Crisis in Rome: The Final Decades of the Roman Republic	3
CLS 308	Pagans and Christians	3
CLS 309	Greek and Roman Religion	3
CLS 311	Alexander the Great	3

1 6 CLG credits strongly recommended for students on CLS-Latin track.

2 6 CLL credits strongly recommended for students on CLS-Greek track.

Interdepartmental Electives

Code	Title	Credits
ANT 230	Introduction to Archaeology	3
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 213	Greek and Roman Art	3
HIS 106	The Medieval World	3
HIS 203	Castles, Bones and Battleaxes: Material Culture of the Medieval World	3
HON 110	Western Tradition I	3
RST 201	Introduction to the New Testament	3
PHI 300	History of Philosophy I	3
RST 325	Early Christianity	3

Additional Course Considerations

Classics majors who are interested in pursuing graduate work in Classics are encouraged to enroll in German and French language courses.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman

Fall	Spring
Select one of the following:	Select one of the following:
CLS 103 or 206	CLS 104 (if took CLS 206 in fall)
AND one of the following:	CLS 205 (if took CLS 103 in fall)
Greek track: CLG 101 (Elementary Greek I)	AND one of the following:
Latin track: CLL 101 (Elementary Latin I)	Greek track: CLG 102 (Elementary Greek II)
Classical Studies track: CLG 101 or CLL 101	Latin track: CLL 102 (Elementary Latin II)
	Classical Studies track: continue language taken in fall (CLG 102 or CLL 102)

Sophomore

Fall	Spring
Classics Major elective[1]	Classics Major elective
AND one of the following:	AND one of the following:
Greek track: CLG 200-level	Greek track: CLG 200-level
Latin track: CLL 200-level	Latin track: CLL 200-level
Classical Studies track: CLG 200-level or CLL 200-level	Classical Studies track: CLG 200-level or CLL 200-level

Junior

Fall	Spring
Classics Major elective[2]	Classics Major elective[3]
AND one of the following:	AND one of the following:
Greek track: CLG 200 or 300-level	Greek track: CLG 300-level
Latin track: CLL 200 or 300-level	Latin track: CLL 300-level
Classical Studies track: one additional major elective	Classical Studies track: one additional major elective

Senior

Fall	Spring
Classics Major elective	Classics Major elective
AND one of the following:	AND one of the following:
Greek track: CLG 300-level	Greek track: CLG 400 (Core Capstone)
Latin track: CLL 300-level	Latin track: CLL 400 (Core Capstone)
Classical Studies track: one additional major elective	Classical Studies track: CLG 400 or CLL 400 (Core Capstone)

1 The department strongly recommends majors take CLS 207 as one of their electives.

2 CLL 101 (Elementary Latin I) strongly recommended as an elective for majors on the Greek track and CLG 101 (Elementary Greek I) strongly recommended for Latin track majors.

3 CLL 102 (Elementary Latin II) strongly recommended as an elective for majors on the Greek track and CLG 102 (Elementary Greek II) strongly recommended for Latin track majors.

Learning Goals & Objectives

CONTENT:

Learning Goal 1

Students will develop proficiency in ancient Greek and/or Latin.

Students will:

- Objective A: Demonstrate mastery of vocabulary, lexical skills, grammar, and syntax.
- Objective B: Produce a sound English translation of a Greek or Latin text which illustrates clear understanding of the text's meaning.

Learning Goal 2

Students will develop a command of ancient Greek and/or Roman literature and history.

Students will:

- Objective A: Distinguish various features associated with major Greek and/or Latin authors and literary genres.
- Objective B: Contextualize various people, events, and artifacts important to the study of Greek and/or Roman history and historiography.

SKILLS:

Learning Goal 3

Students will develop proficiency in the use of reference works and databases central to the discipline of Classics.

Students will:

- Objective A: Compile a bibliography on a classical subject, work, or author using standard Classics reference works and databases.
- Objective B: Write a paper on a classical subject, work, or author which incorporates specific Greek and/or Latin words or phrases and illustrates proficiency in using standard Classics reference works and databases.

HUMANITAS:

Learning Goal 4

STUDENTS WILL DEVELOP A SENSE OF CONNECTION BETWEEN THE STUDY OF CLASSICS AND CARE FOR OTHERS THROUGH CLASSES AND ACTIVITIES ASSOCIATED WITH THE MAJOR.

Students will:

- Objective A: Engage in a service learning opportunity in a class and write a reflective essay about the experience.
- Objective B: Engage in a service learning opportunity designed by themselves with the guidance of department faculty and write a reflective essay about the experience.

Minor

A minor in Classics complements the disciplines of Art History, Creative Writing, English, History, Modern Languages, Political Science, Philosophy, Religious Studies, and it is especially beneficial for students interested in careers in law or medicine. Classics minors are encouraged to become members of the Canisius Classics Club, to attend the weekly departmental Classics Tea@2, and to participate in events sponsored by the Institute for Classical and Medieval Studies (https://blogs.canisius.edu/icms/).

Students must complete the appropriate minor request form.

Students who wish to minor in Classics must meet the following requirements:

Code	Title	Credits
Classical Language (CLG or CLL) Required Courses		
Two semesters of Greek or Latin (CLG OR CLL)		6
Classics (CLS) Required Courses		
CLS 103	Greek History	3
or CLS 104	Roman History	
CLS 205	Mirror of the Past: Greece	3
or CLS 206	Mirror of the Past: Rome	
Classics Electives		
Two upper-level electives from the following:		6
Any CLG, CLL, or CLS courses at the 200-level or above		
FAH 210	Ancient Egyptian and Near Eastern Art	
FAH 213	Greek and Roman Art	
Total Credits		18

Courses

Classics (CLS) (p. 114); Greek (CLG) (p. 115); Latin (CLL) (p. 116)

Classics--CLS

CLS 103 Greek History **3 Credits**
Social, political, and intellectual history of the Greeks from the end of the Bronze Age to the Hellenistic period.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: every fall.

CLS 104 Roman History **3 Credits**
Social, political, and intellectual history of Rome from the foundation of the city to late antiquity.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: every spring.

CLS 205 Ancient Greece: Culture and Society **3 Credits**
Fundamental social, political, moral, religious, and intellectual aspects of the human condition as reflected in a variety of Greek writers, art, and artifacts.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: once a year.

CLS 206 Ancient Rome: Culture and Society **3 Credits**
Fundamental social, political, moral, religious, and intellectual aspects of the human condition as reflected in a variety of Roman writers, art, and artifacts.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: once a year.

CLS 207 Mythology and Literature **3 Credits**
Origin, content, and interpretation of the major classical myths. Modern approaches to mythology. Influence upon literature and ethical principles and theories.
Fulfills College Core: Ethics, Field 3 (Literature and the Arts)
Offered: fall & spring.

CLS 209 Greek and Roman Archaeology **3 Credits**
History, methods, major sites, and current topics in Greek and Roman Archaeology from the Bronze Age through Late Antiquity.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: spring 2017.

CLS 211 Archaeology of Pompeii **3 Credits**
On August 24th, 79 C.E., Mt. Vesuvius erupted and destroyed the towns of Pompeii and Herculaneum, as well as countless farms and villas in the countryside. The ash and pyroclastic flows killed all who had not yet fled, and preserved the cities in the moment of their destruction. Their archaeological rediscovery in the 1700s led to 250 years of excavations which have continued to provide us with astonishing evidence about the people who lived and died in the shadow of Vesuvius. Every aspect of ancient life is represented in these two towns—poor and rich, free and enslaved, work and leisure, religion, politics, art, food, and even sex. If you want to know what it was like to live in the Roman Empire, don't go to Rome—come to Pompeii!
Prerequisite: None. **Corequisite:** None.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: spring of odd-numbered years.

CLS 212 Borders, Walls, and Immigrants in the Ancient World **3 Credits**
Examination of momentous migrations and displacements around the Mediterranean (Greek colonization, Roman veteran settlement, Gothic invasions), from the Bronze Age to the Middle Ages; the economic, religious, social, and political motivations; the impact; Greco-Roman concepts of borders and "Frontier"; case studies (Hadrian's Wall); themes in immigration studies, including theories of assimilation/resistance, diaspora, ethnicity, and identity.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: occasionally.

CLS 214 Greek and Roman Tragedy **3 Credits**
Study of Greek and Roman tragedy, its origins, cultural setting, staging, performance, and influence. Readings from Aeschylus, Sophocles, Euripides, and Seneca.
Fulfills College Core: Ethics, Field 3 (Literature and the Arts), Oral Communication
Offered: fall & spring.

CLS 219 Animals in the Ancient World **3 Credits**
This course studies the role animals played in ancient human societies through their use and function in mythology, religious thought, literature, social identity, and rituals, and in how they were analyzed and imagined. Students learn what the study of archaeology, art, literature, and anthropology tell us about the cultural importance of animals to ancient civilizations. A range of archaeological and anthropological evidence will be analyzed and discussions will be based on contemporary critical animal theory. Students also read a broad range of texts in translation (including epic, fable, novel, philosophy, natural science) and explore themes of sacrifice, initiation, metamorphosis, animal culture, and the customs and ethics of eating animals, and of using them for military purpose, entertainment or spectacle.
Prerequisite: None. **Corequisite:** None.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: occasionally.

CLS 220 Greek and Latin Roots of Medical Terminology **3 Credits**
An introductory course on the fundamental Greek and Latin roots of medical terminology in preparation for a career in the health sciences professions. Acquire knowledge to understand, speak, and write the language of contemporary medicine by learning how to analyze roots, prefixes, and suffixes, and their predictable patterns of combinations. Material covered includes anatomy, all systems of the human body, psychology and substance terminology, along with basic language history, linguistic principles, and etymology.
Offered: occasionally.

CLS 300 Roman Law and Society **3 Credits**
Exploration of major concepts and principles of Roman law and the society in which they developed. Studies of cases from the writings of Roman jurists.
Fulfills College Core: Field 5 (Social Sciences), Justice, Oral Communication
Offered: anticipated fall 2021.

CLS 301 Culture and Crisis in Rome: The Final Decades of the Roman Republic **3 Credits**
Introduction to Roman culture and politics in the first century BCE; careful examination of the vibrant literary, intellectual, judicial, and social environment amid political crises that ended with Rome's transition from republic to empire.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: occasionally.

CLS 308 Pagans and Christians **3 Credits**
Religious thought and action from the 3rd through 8th centuries A.D. The idea of the holy; manifestations of the sacred; body, soul, and cosmos; Christianity and classical culture; Neoplatonism.
Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness
Offered: anticipated spring 2020.

CLS 309 Greek and Roman Religion **3 Credits**
Religious thought and action in ancient Greece and Rome from Homer through the 2nd century A.D. Polytheism, anthropomorphism, ritual, cult and sacrifice.
Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness, Oral Communication
Offered: every fall.

CLS 311 Alexander the Great **3 Credits**
Philip II and the rise of Macedon. Alexander's personality, his conquests, and the social, political, and intellectual consequences of his reign. Hellenistic culture.
Fulfills College Core: Global Awareness
Offered: anticipated spring 2022.

CLS 314 The Decline and Fall of the Roman Empire **3 Credits**
Imperial crisis and recovery of the third century, Constantine and Christianity, barbarian invasions, social, political, and intellectual developments in the Byzantine East and Latin West. Historiography of the "Decline and Fall."
Offered: anticipated spring 2021.

CLS 499 Independent Study **3-6 Credits**
Directed research on a selected topic. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: occasionally.

Greek--CLG

CLG 101 Elementary Greek I **3 Credits**
Intensive introduction to the grammar, syntax, and vocabulary of classical Greek. Selected readings. Fall.
Offered: every fall.

CLG 102 Elementary Greek II **3 Credits**
Intensive introduction to the grammar, syntax, and vocabulary of classical Greek. Selected readings.
Prerequisite: CLG 101 or permission of instructor.
Offered: every spring.

CLG 203 Greek Literature: Homer **3 Credits**
Selected readings from Homer.
Prerequisite: CLG 102 or permission of instructor.

CLG 208 Greek Historians **3 Credits**
Selected Greek historical authors, genres, or themes.
Prerequisite: CLG 102 or permission of instructor.

CLG 209 Greek Historians: Xenophon **3 Credits**
Selected readings from Xenophon.
Prerequisite: CLG 102 or permission of instructor.

CLG 213 Greek Philosophers **3 Credits**
Book I of Plato's Republic and related texts.
Prerequisite: CLG 102 or permission of instructor.

CLG 214 Readings in Greek Philosophy **3 Credits**
Heraclitus and Book 1 of Aristotle's Nicomachean Ethics.
Prerequisite: CLG 102 or permission of instructor.
Offered: occasionally.

CLG 303 Readings in Greek: Homer **3 Credits**
Selected readings from Homer.
Prerequisite: CLG 102 or permission of instructor.

CLG 305 Readings in Greek Literature: Daphnis and Chloe **3 Credits**
Longus' Daphnis and Chloe.
Prerequisite: CLG 102 or permission of instructor.

CLG 306 Readings in Greek Literature **3 Credits**
Selected Greek historical authors, genres, or themes.
Prerequisite: CLG 102 or permission of instructor.

CLG 307 Readings in Greek Literature **3 Credits**
Selected Greek literary authors, genres, or themes.
Prerequisites: CLG 102 or permission of instructor.
Offered: occasionally.

CLG 308 Readings in Greek History: Sources for Athenian History **3 Credits**
Selected Inscriptions and portions the Constitution of Athens attributed to Aristotle.
Prerequisite: CLG 102 or permission of instructor.

CLG 314 Readings in Greek Philosophy **3 Credits**
Heraclitus and Book 1 of Aristotle's Nicomachean Ethics.
Prerequisites: CLG 102 or permission of instructor.
Offered: occasionally.

CLG 400 Paideia **3 Credits**
Selected Greek authors, texts, themes, or genres.
Prerequisite: at least two semesters of CLG courses, completion of all other core curriculum requirements, & permission of the chair or instructor.

CLG 499 Independent Study: Greek **3 Credits**
Directed research on a selected topic. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Latin--CLL

CLL 101 Elementary Latin **3 Credits**
Intensive introduction to the grammar, syntax, and vocabulary of classical Latin. Selected readings.
Offered: every fall.

CLL 102 Elementary Latin II **3 Credits**
Intensive introduction to the grammar, syntax, and vocabulary of classical Latin. Selected readings.
Prerequisite: CLL 101, or one year of high school Latin through the senior year, or permission of instructor.
Offered: every spring.

CLL 201 Latin Literature **3 Credits**
Selected Latin literary authors, genres, or themes.
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.

CLL 203 Roman Comedy **3 Credits**
Close reading and analysis of selected comedies from Plautus and Terence. Study of the relation to Greek new Comedy, colloquial Latin language, and social structures in Rome revealed in the plays.
Prerequisite: CLL 102 or permission of instructor.
Offered: occasionally.

CLL 204 Readings in Latin Literature **3 Credits**
Selected Latin literary authors, genres, or themes.
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.

CLL 205 Latin Literature **3 Credits**
Selected Latin literary authors, genres, or themes.
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.

CLL 206 Latin Poetry: Catullus **3 Credits**
Careful study of the themes, style, and meters of Catullus' poems, his place in the tradition of Latin poetry, and his influence on later poets. Requires prior study of Latin or permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

CLL 207 Latin Literature **3 Credits**
Readings in selected Latin literary authors, genres, or themes.
Prerequisites: at least two years of Latin in high school through the senior year, or CLL 102, or permission of instructor.
Offered: occasionally.

CLL 210 Roman Historians **3 Credits**
Close reading and analysis of selections from one or more o fthe Latin historians. Sallust, Livy and Tacitus.
Prerequisite: CLL 102 or permission of instructor.
Offered: occasionally.

CLL 211 Latin Biography **3 Credits**
Selections from Latin biographers.
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.

CLL 213 Roman Philosophers **3 Credits**
Selected Roman philosophical authors, genres, or themes.
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.

CLL 301 Readings in Latin Literature **3 Credits**
Selected Latin literary authors, genres, or themes.
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.

CLL 304 Readings in Latin Literature **3 Credits**
Selected Latin literary authors, genres, or themes.
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.

CLL 305 Readings in Latin Literature **3 Credits**
Selected Latin literary authors, genres, or themes.
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.

CLL 310 Roman Historians **3 Credits**
Close reading and analysis of selections from one or more o fthe Latin historians. Sallust, Livy and Tacitus.
Prerequisite: CLL 102 or permission of instructor.

CLL 400 Humanitas **3 Credits**
Selected Latin authors, texts, themes, or genres.
Prerequisite: at least two semesters of CLL courses, completion of core requirements, & permission of the chair.
Fulfills College Core: Core Capstone
Offered: fall & spring.

CLL 499 Independent Study: Latin **3 Credits**
Directed research on a selected topic. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: occasionally.

Clinical Laboratory Science (BS)

Director: Robert Grebenok, PhD (grebenor@canisius.edu)

Introduction

Medical Laboratory Scientists perform tests to help diagnose and treat disease and maintain wellness. Medical laboratory data is the basis of up to 80 percent of all medical diagnoses. Advances in technology and prescription medical treatment, the mapping of the human genome, and the aging of America's population all contribute to the growing national demand for clinical lab professionals. Our program prepares graduates to analyze human blood, tissues and body fluids which aid in the diagnosis, treatment, and prevention of diseases. Medical Laboratory Scientists conduct such tests as typing and cross matching of blood and blood components, drug monitoring (for therapeutic and illegal drugs), identifying infectious microorganisms and their susceptibility to specific treatments, determining a patient's genetic predisposition to a variety of inherited diseases, and identifying anemias, leukemia and other blood disorders. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Medical Laboratory Science website (https://www.canisius.edu/academics/programs/medical-laboratory-science/).

The interdisciplinary curriculum of the Medical Laboratory Science major is concentrated in the natural sciences with special emphasis on biology and chemistry. Students take classes on campus for the first three years of the program and spend their senior year in either an 11-month or a 51-week hospital based clinical internship. During the clinical internship, students study the full range of clinical laboratory fields including hematology, clinical chemistry, immunology, microbiology, histology and immunohematology.

At Canisius, this learning experience is one of quality and value enhanced by small class sizes. The full-time professors you will encounter are trained professionals who hold doctoral degrees in their areas of expertise. During the clinical internship, the faculty will consist of PhDs, pathologists, clinical laboratory scientists, and others recognized for their experience in the various sub-specialties of laboratory medicine.

To be successful in the profession, you must be licensed by the New York State Office of the Professionals. To learn more information about the licensure program please go to the NYSED website (http://www.op.nysed.gov/).

Qualifications

The program is a rigorous one, with very modest flexibility. The course offerings reflect the solid background in the sciences required for the internship experience. During the student's junior year, application is made to accredited hospital schools of medical technology. The burden of acceptance into a hospital program rests with the students. Canisius currently affiliates with the Rochester General Hospital School of Medical Technology (Rochester, NY) and UPMC Chautauqua WCA Hospital School of Medical Technology (Jamestown, NY.) Students are enrolled as Canisius students while completing the hospital program. Because this program requires a competitive application into the hospital based clinical year, we recommend a minimum GPA of at least 3.00 with a strong performance in the upper level sciences.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

(20 courses)

Code	Title	Credits
BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II	4
BIO 307 & 307L	Microbiology and Microbiology Laboratory	4
BIO 426 & 426L	Immunochemistry and Immunochemistry Laboratory	4
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
MAT 141	Inferential Statistics and Computers for Science	4
Science Elective: Two upper level science courses approved by Director		6-8
MDT 280 & MDT 281	Seminar: Sophomore Level I and Seminar: Sophomore Level II	2
MDT 380 & MDT 381	Seminar: Junior Level I and Seminar: Junior Level II	2
MDT 400 & MDT 401	Hospital Rotation: Med Tech I and Hospital Rotation: Med Tech II	30
Total Credits		88-90

Learning Goals & Objectives

Student Learning Goal 1

Medical Laboratory Science majors will possess the scientific knowledge and laboratory skills to be competent and contributing members of the health-care delivery system. (Science)

Students will:

- **Objective A**: Demonstrate foundational knowledge in inorganic chemistry, organic chemistry, biochemistry, anatomy and physiology, microbiology, immunology, and statistics
- **Objective B**: Understand the components of the diagnostic process and the role of the clinical laboratory; and
- **Objective C**: Perform and interpret results of clinical laboratory tests including: blood bank, urinalysis and other body fluids, chemistry, hematology, immunology, and microbiology.

Student Learning Goal 2

Medical Laboratory Science majors will effectively communicate audience specific medical and scientific information. (Communication)

Students will:

- **Objective A**: Accurately record laboratory results;
- **Objective B**: Effectively communicate laboratory results to others; and
- **Objective C**: Use appropriate information to explain laboratory tests and results.

Student Learning Goal 3

Medical laboratory Science majors will demonstrate professional and ethical behavior. (Professionalism)

Students will:

- **Objective A**: exhibit appropriate patient interaction and confidentiality;
- **Objective B**: Objective B: adhere to safety guidelines and regulations; and
- **Objective C**: demonstrate positive and constructive interactions with peers, medical team, and patients.

Courses

MDT 280 Seminar: Sophomore Level I **1 Credit**
Introduction to the Clinical Science Laboratory profession from variety of perspectives: history, present state of health-care delivery, job opportunities, organization of hospital laboratory. Tour of hospital laboratory.
Prerequisite: permission of program director.

MDT 281 Seminar: Sophomore Level II **1 Credit**
Continuation of MDT 280.
Prerequisite: permission of program director.

MDT 380 Seminar: Junior Level I **1 Credit**
Advanced discussions of Clinical Science Laboratory theory and practice designed as preparation for senior-year hospital rotation. Tour of hospital laboratory.
Prerequisite: permission of program director.

MDT 381 Seminar: Junior Level II **1 Credit**
Continuation of MDT 380.
Prerequisite: MDT 380 and permission of program director.

MDT 400 Hospital Rotation: Med Tech I **15 Credits**
A year-long, hospital based program. Students learn to perform, develop, evaluate, correlate and assure accuracy and validity of laboratory information in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunohematology/Transfusion Medicine, Microbiology, Urine and Body Fluid Analysis; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients.
Prerequisite: acceptance into a hospital-based clinical program.

MDT 401 Hospital Rotation: Med Tech II **15 Credits**
A year-long, hospital based program. Students learn to perform, develop, evaluate, correlate and assure accuracy and validity of laboratory information in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunohematology/Transfusion Medicine, Microbiology, Urine and Body Fluid Analysis; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients.
Prerequisite: MDT 400.

Communication Studies (BA)

Chair: John S. Dahlberg, PhD

Introduction

The Communication Studies major is grounded firmly in the liberal arts tradition. The Communication Studies curriculum reflects an equal interest in what is communicated within and between cultures and in how communication takes place in relational (intrapersonal/interpersonal), organizational and mediated contexts. The department's curriculum addresses three major facets of the academic study of communication: theory, criticism and professional skills. In the Communication Studies program, students examine the dynamic nature of modern communication processes and technologies by emphasizing the theory, structure, function, value systems and effects of society's communication institutions. In practical terms, students examine how we communicate as families, couples and friends. We study how we interact in work and corporate settings; how we persuade and are persuaded, as individuals, professionals and intended targets; and how we affect others through various media, from oral to written to electronic to digital. The program offers students a variety of opportunities to acquire professional knowledge, skills and production competencies relevant to diverse careers in many communication-related fields. Recognizing the need to prepare students for productive lives in a changing world, the department aims at educating its graduates to welcome change. In a rapidly changing and highly competitive job market, the Communication Studies faculty provides the foundation on which to build meaningful roles in the contemporary world. Students may concentrate in Media Studies, Advertising and Public Relations, and/or Relational/Organizational Communication. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Communications Studies website (https://www.canisius.edu/academics/programs/communication-studies/).

Qualifications

Majors must have a cumulative GPA of at least 2.0, a minimum grade of C- in all communication courses, and a minimum overall average of 2.0 in all communication coursework. Performance of majors is subject to review relative to their continuation in the program. Communication Studies majors select an academic concentration within the Communication major and need at least 36 hrs. of communication courses (33 hrs. for double majors).

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Communication Studies majors are assigned an advisor at the beginning of their freshman year. If you are a transfer into the Communication Studies major or you do not have an advisor, please contact the Communication Studies departmental office at 716-888-2115 so that an advisor can be assigned to you.

Major Experiences

Internships

Internships (COM 488 , COM 498) awarding up to a maximum of 12 credit hours may be earned by qualified Communication Studies majors at approved locations in Buffalo or other cities. The internships are individually arranged, require department approval and are available only to junior or senior candidates with a cumulative GPA of at least 2.5 and a Communication average of at least 2.7. Internships are taken on a Pass/Fail basis and are counted towards free elective credit. Students are encouraged to plan early to do internships during their junior and senior years. Interested majors should consult with their advisor or see the department chair for more information.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Double majors with Communication Studies are available with the permission and guidance of both chairs. Students complete a minimum of 33 credit hours of communication courses. Communication Studies dual major sequences allow several different choices; among those most frequently involved are digital media arts, journalism, political science, psychology, sociology, English, creative writing, history, marketing and modern languages. Each Communication Studies and dual major is assigned a department faculty advisor for the purpose of planning an individual program that will satisfy the department's requirements and the student's personal goals. Course selections develop from communication major requirements, prerequisites, recommended sequences and communication electives. Communication Studies students who are double majors and successfully complete 3 or more credit hours in Internships (COM 488, COM 498) are required to complete 30 hours of in-class credit in order to complete the Communication Studies major (i.e., not 33 or 36 in-class hours).

Students interested in declaring double majors within the Department of Communication (Communication Studies (p. 118), Digital Media Arts (p. 134), Integrated Marketing Communication (p. 180), or Journalism (p. 186)) will be allowed to share a maximum of 9 credits between the two majors. This requires 24 distinct credits for communication studies, 27 distinct credits for digital media arts, 36 distinct credits for integrated marketing communication, and 24 distinct credits for journalism. Additionally, for students with a double major outside the Department of Communication, students may double count up to 9 credit hours of electives between the two majors. Please note, however, that the second major may not necessarily allow double counting of credits. For more information, please contact the department chair.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Major Required Courses		
COM 201	Oral Communication	3
COM 202	Communication Theory	3
COM 203	Writing for the Public Media	3
COM 204	Interpersonal Communication	3
COM 205	Mass Communication and Society	3
COM 206	Introduction to Research Methods [1]	3
Select 3 electives from one of the COM concentrations		9
Select 3 additional major electives [2]		9
Total Credits		36

1 Double majors in Communications and another social science (e.g., Political Science, Psychology, Sociology, or Criminal Justice) may elect to substitute PSY 202, SOC 342, ANT 351, or HSV 303. Please consult with your advisor or the department chair for details.

2 Students can elect to complete the balance of credits from any approved COM electives. Students are free to take any number of COM electives beyond the required 36 credits (33 for double majors), to fulfill their free elective credit needs.

Concentration Courses

Relational/Organizational Communication

Code	Title	Credits
COM 302	Small Group Communication	3
COM 304	Family Communication	3
COM 308	Social Media Effects	3
COM 318	Organizational Communication	3
COM 319	Training and Development	3
COM 327	Gender Differences in Human Communication	3
COM 335	Communication and Personality	3
COM 337	Constructive Uses of Humor	3
COM 350	Health Communication	3
COM 354	Persuasion	3
COM 359	Communication and Sports	3

Advertising/Public Relations Communication

Code	Title	Credits
COM 308	Social Media Effects	3
COM 311	Principles of Advertising	3
COM 312	Public Relations: Principles and Practices	3
COM 315	Advertising and the Creative Process	3
COM 320	Advertising Writing	3
COM 330	Public Relations Writing	3
COM 340	Media Relations	3
COM 348	Environmental Communication	3
COM 353	Advertising Account Strategies	3
COM 411	Advertising Campaigns	3
COM 412	Public Relations Case Studies	3
COM 414	Issues in Integrated Marketing Communications	3
COM 422	Public Relations Campaigns	3

Media Studies Communication

Code	Title	Credits
COM 308	Social Media Effects	3
COM 325	Media Literacy	3
COM 351	Media Ethics	3
COM 361	Introduction to TV Production	3
COM 367	Broadcasting in America	3
COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genres	3
COM 378	American Film Directors	3
COM 385	Media & Children	3
COM 479	World Cinema	3

Major Electives

Code	Title	Credits
COM 302	Small Group Communication	
COM 304	Family Communication	
COM 308	Social Media Effects	
COM 311	Principles of Advertising	
COM 312	Public Relations: Principles and Practices	
COM 315	Advertising and the Creative Process	
COM 318	Organizational Communication	
COM 319	Training and Development	
COM 320	Advertising Writing	
COM 325	Media Literacy	
COM 327	Gender Differences in Human Communication	
COM 330	Public Relations Writing	
COM 335	Communication and Personality	
COM 337	Constructive Uses of Humor	
COM 350	Health Communication	
COM 351	Media Ethics	
COM 353	Advertising Account Strategies	
COM 354	Persuasion	
COM 359	Communication and Sports	
COM 361	Introduction to TV Production	
COM 374	Film History	
COM 375	Film Classics	
COM 376	Film Genres	
COM 378	American Film Directors	
COM 385	Media & Children	
COM 411	Advertising Campaigns	
COM 412	Public Relations Case Studies	
COM 414	Issues in Integrated Marketing Communications	
COM 418	Interviewing	
COM 422	Public Relations Campaigns	
COM 479	World Cinema	
COM 488	Internship I Seminar	
COM 491	Video Institute I	
COM 492	Video Institute II	
COM 498	Internship II Seminar	
COM 499	Independent Study	
DMA 201	Introduction to Digital Media	
DMA 215	Digital Media Culture	
DMA 216	Digital Media Law	
DMA 212	2D Graphics	
DMA 217	Interaction Design	
DMA 310	Digital Audio/Music Production	
DMA 342	Introduction to Web Design	
DMA 385	Digital Filmmaking	
DMA 442	Advanced Web Design	
FAS 140	Introduction to Still Photography [1]	
FAS 141	Digital Photography [1]	
JRN 310	Journalism	
JRN 311	Advanced Journalism and Investigative Reporting	
JRN 322	Feature/Magazine Writing	

JRN 336	Sports Journalism	
JRN 369	Television Features	
Total Credits		0

[1] Only 6 credits of FAS photography courses can be applied as COM elective credit.

Note: Four computer labs, HD digital video editing stations, an audio/music production studio and an HD television studio/control room are available for student use in Lyons Hall.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
COM 205	COM 204
Sophomore	
Fall	**Spring**
COM 201	COM 202
COM 206 (or COM Elective)	COM 203 (or COM Elective)
Junior	
Fall	**Spring**
COM 206 (or COM Elective)	COM 203 (or COM Elective)
Senior	
Fall	**Spring**
COM Elective	COM Elective
COM Elective	COM Elective

Learning Goals & Objectives

These learning goals and objectives apply to all Communication Studies majors.

Student Learning Goal 1:

Communication Studies majors will be critical thinkers who apply communication theories and concepts in life situations.

Students will:

- **Objective 1:** Demonstrate advanced skills in analyzing research.
- **Objective 2:** Apply targeted communication theories and constructs to specific projects or situations.

Student Learning Goal 2:

Communication Studies majors will design and deliver effective messages.

Students will:

- **Objective 1:** Demonstrate an understanding of the intended audience
- **Objective 2:** Determine appropriate means of communication to reach that audience.
- **Objective 3:** Demonstrate an ability to design and deliver messages.

Minor

Communication Studies Minor

The Communication Studies department offers a general Communication Studies minor for students wishing to add the study of communication to the their curricula. Students need to complete 18 credit hours of Communication Studies courses, based on the following requirements:

Code	Title	Credits
Foundation Courses		
Select 3 of the following: [1]		9
COM 201	Oral Communication	
COM 202	Communication Theory	
COM 203	Writing for the Public Media	
COM 204	Interpersonal Communication	
COM 205	Mass Communication and Society	
COM 206	Introduction to Research Methods	
Concentration Courses		9
Select 1 course from Relational/Organizational Communication		
Select 1 course from Advertising/Public Relations Communication		
Select 1 course from Media Studies Communication		
Total Credits		18

[1] **Note:** A section of each foundation course is offered every semester. Multiple sections of COM 201 and COM 203 are offered each semester.

Concentration Courses

Relational/Organizational Communication

Code	Title	Credits
COM 302	Small Group Communication	3
COM 304	Family Communication	3
COM 308	Social Media Effects	3
COM 318	Organizational Communication	3
COM 319	Training and Development	3
COM 327	Gender Differences in Human Communication	3
COM 335	Communication and Personality	3
COM 337	Constructive Uses of Humor	3
COM 350	Health Communication	3
COM 354	Persuasion	3
COM 359	Communication and Sports	3

Advertising/Public Relations Communication

Code	Title	Credits
COM 311	Principles of Advertising	3
COM 312	Public Relations: Principles and Practices	3
COM 315	Advertising and the Creative Process	3
COM 320	Advertising Writing	3
COM 330	Public Relations Writing	3
COM 340	Media Relations	3
COM 348	Environmental Communication	3
COM 353	Advertising Account Strategies	3
COM 411	Advertising Campaigns	3
COM 412	Public Relations Case Studies	3
COM 414	Issues in Integrated Marketing Communications	3
COM 422	Public Relations Campaigns	3

Media Studies Communication

Code	Title	Credits
COM 325	Media Literacy	3
COM 351	Media Ethics	3

COM 361	Introduction to TV Production	3
COM 367	Broadcasting in America	3
COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genres	3
COM 378	American Film Directors	3
COM 385	Media & Children	3
COM 479	World Cinema	3

Courses

COM 201 Oral Communication **3 Credits**
Study and practice of concepts, processes and techniques of effective verbal communication in face-to-face, small group and public-address contexts. Speeches required.
Fulfills College Core: Oral Communication
Offered: fall & spring.

COM 202 Communication Theory **3 Credits**
Fundamental forms of communication theory and perspectives are explored and related to daily life applications and particular lines of research in relational, group, organizational, gender, social media, public and mass mediated communication contexts.
Offered: every spring.

COM 203 Writing for the Public Media **3 Credits**
Intensive writing assignments employing message-design principles provide opportunities to prepare news, features, press releases, advertising copy and opinion pieces.
Fulfills College Core: Advanced Writing-Intensive
Offered: fall & spring.

COM 204 Interpersonal Communication **3 Credits**
Examines the theoretical and pragmatic aspects of interpersonal communication in various contexts to enhance self-awareness and effective self-expression in relationships.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.

COM 205 Mass Communication and Society **3 Credits**
Survey of mass communication processes and the mass media in terms of development, industry structure, functions, effects and interactive relationships with American society.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.

COM 206 Introduction to Research Methods **3 Credits**
The fundamentals of the scientific method, especially the basics of research methods, designs and hypothesis testing.
Offered: every fall.

COM 211 Introduction to Integrated Marketing Communication **3 Credits**
An introduction to the historical, theoretical and practical implications of integrated marketing communication that spans decades and communication channels to affect an array of stakeholders and target publics. Students will learn the basics of how integrated marketing communication has evolved from disparate skill sets (advertising, public relations, marketing, social media, e.g.) into a unified approach to communicating to various market segments. In addition, they will explore the various elements of IMC and learn the advantages of each and their optimal application in the marketplace.
Offered: every fall.

COM 302 Small Group Communication **3 Credits**
Communication variables in small groups involving task, maintenance, leadership, conformity, shift-to-risk and development. Some emphasis on skill development.
Offered: every other year.

COM 304 Family Communication **3 Credits**
Examines contemporary family communication theories, concepts, models and research. Special emphasis on improving family communication across the lifespan.
Fulfills College Core: Field 5 (Social Sciences)
Offered: every other year.

COM 308 Social Media Effects **3 Credits**
This course provides an overview of the effects of social media use on our interactions and relationships. It als examines individual differences in social media use as well as how social media is used to manage one's identity. Open to Communications Studies majors and minors only.
Offered: spring of odd-numbered years.

COM 311 Principles of Advertising **3 Credits**
The fundamentals of advertising, including history and development, advertising media, marketing, audiences, campaign objectives, budget, creativity and agency functions. (DMA elective).
Offered: fall.

COM 312 Public Relations: Principles and Practices **3 Credits**
Historical antecedents and contemporary practice of public relations are examined in the context of public relations concepts and theories. The course also examines the day-to-day responsibilities and ethical obligations of PR practitioners in a variety of public settings. (ADV/PR sequence).
Offered: fall.

COM 315 Advertising and the Creative Process **3 Credits**
Study of techniques, tools and theories for generating innovative concepts and ideas. Emphasize application to advertising context. (DMA elective).
Offered: every other year.

COM 318 Organizational Communication **3 Credits**
Communication principles and practices, including communicator style variables, communication flow and competent superior-subordinate communication.
Offered: fall.

COM 319 Training and Development **3 Credits**
Methods for assessing training needs within organizations, and designing, implementing and assessing outcomes of training. Emphasis on principles of effective training and development of training competencies. Students develop training skills.
Fulfills College Core: Oral Communication
Offered: spring.

COM 320 Advertising Writing **3 Credits**
Covers a variety of ways of developing advertising copy (copywriting) and creative concepts for persuasive advertising pieces. Includes workshop writing for print, television and radio commercials, and social media.
Offered: every other year.

COM 325 Media Literacy **3 Credits**
Focuses on theoretical approaches and practical skills. Students learn to analyze, think critically and produce effective mediated messages through the production of a service-oriented video project. Service Learning Option. (DMA, JRN elective).
Offered: every other year.

COM 327 Gender Differences in Human Communication **3 Credits**
Examines gender as a variable of interest in social interaction with special emphasis on contemporary gender theories, concepts, and research. Understand the reasons why communication misunderstandings related to gender differences occur.
Offered: every other year.

COM 330 Public Relations Writing **3 Credits**
Theoretical perspectives on various forms of public relations writing and the applications of each. Writing and editing skills. Students produce portfolio of PR writing tools and techniques. (ADV/PR).
Offered: spring.

COM 335 Communication and Personality **3 Credits**
The role of personality in human communication (especially argumentative and aggressive traits). Emphasis on critical thinking and constructive arguing. Students develop arguing skills.
Offered: every other year.

COM 337 Constructive Uses of Humor **3 Credits**
Survey of classic and contemporary humor theories, concepts and research. Special emphasis on research that highlights the benefits of humor in education, medicine, business and relational contexts.
Offered: every other year.

COM 340 Media Relations **3 Credits**
One form of public relations is communicating with audiences through the news media. This course focuses on the principles and practices of media relations. (ADV/PR sequence).
Offered: every other year.

COM 348 Environmental Communication **3 Credits**
Writing about the environment began in earnest with Thoreau, continued with Rachel Carson and Silent Spring, and is an important issue for journalists, PR specialists, environmental scientists and ordinary citizens. This course examines issues in environmental communication from the various public roles. (ADV/PR sequence).
Offered: every other year.

COM 350 Health Communication **3 Credits**
Examines how communication plays a role in the health decisions people make from a variety of perspectives. Focuses on theoretical approaches to health communication, influence tactics, challenges associated with medical adherence/compliance gaining, caregiver- client communication, how personality affects health decisions, nonverbal and verbal factors in the health interaction, and social-cultural factors in health.
Offered: every other year.

COM 351 Media Ethics **3 Credits**
Explores ethics across media disciplines through the work of professional communicators -- journalists, broadcasters, advertising and public relations practitioners. Develop practices of making crucial media decisions based on principles and idealism.
Fulfills College Core: Ethics
Offered: fall.

COM 352 Advanced Interpersonal Seminar **3 Credits**
This class examines interpersonal communication theories, concepts and models.Students learn more about how interpersonal communication research is conducted and develop an original research project on some aspect of interpersonal communication.
Prerequisites: minimum grade of C in COM 204.
Offered: occasionally.

COM 353 Advertising Account Strategies **3 Credits**
Account management is a critical component of marketing and communications. We'll cover the practical aspects of planning, client-agency relationships, functioning effectively in a creative environment, working with media outlets and start to learn how to develop an integrated marketing communications program.
Offered: occasionally.

COM 354 Persuasion **3 Credits**
Students explore classic and contemporary persuasion theories, models and concepts. Students participate in semester long persuasion and social influence projects where they apply theories and concepts.

COM 359 Communication and Sports **3 Credits**
Why do so many people enjoy playing, watching, and talking about sports? This course examines the significance of interpersonal communication in the context of sports. Communication interactions between coaches and athletes, athletes and teammates, coaches and parents, and parents and athletes are explored.
Offered: every other year.

COM 361 Introduction to TV Production **3 Credits**
Studio techniques, lighting, sound recording, set design, electronic graphics and editing, production of live and edited programs in studio. (DMA elective).
Offered: every other year.

COM 367 Broadcasting in America **3 Credits**
Explores all aspects of broadcasting and cable, including history, technology, programs and programming, the ratings, commercial and non-commercial operations, and effects.
Offered: every 2-3 years.

COM 374 Film History **3 Credits**
Development of film making and cinema art from 1895 through World War II. Students study, view, and discuss classic silent and sound pictures from Hollywood and abroad. (DMA elective. Also accepted for Art History major/minor credit).
Offered: every other year.

COM 375 Film Classics **3 Credits**
The development of cinema worldwide from World War II through the 1990s. Study, view and discuss films representative of major directors, genres and national cinema movements. (DMA elective. Also accepted for Art History major/minor credit).
Offered: every other year.

COM 376 Film Genres **3 Credits**
Students who are interested in film professionally or personally are invited to view sequences from the finest motion pictures made in the past 100 years. The course will present an overview of the types (genres) of films, including: Action-Adventure, Animation, Avant-Garde, Biopic, Children's Comedy, Crime, Cult Movies, Documentary, Drama, Film Noir Historical, Horror, Melodrama, Musical, Mystery, Romance, Science Fiction and Fantasy, Serials, War, and the Western.
Offered: every other year.

COM 385 Media & Children **3 Credits**
Learn about the role of television in children's lives. Course explores children's television use, the development and content of children's television programs (both commercial and educational), television and the family, and children's advertising.
Offered: occasionally.

COM 408 Seminar: Special Topics and Not-for-Profit Organizations **3 Credits**

The seminar experience concentrates on current issues and trends in not-for-profit organizations. Topics will vary to meet the changing challenges and opportunities not-for-profit organizations face in light of political climate changes and the evolution of public policy. Topics may include community building, the role of a board of directors, women's issues, aging, public policy, and globalization. The seminar will incorporate discussion of relevant theory and topical issues leading to independent research related to the selected topic(s).
Offered: spring of odd-numbered years.

COM 411 Advertising Campaigns **3 Credits**

Designed as a capstone course for advertising students, this course examines current and classic advertising campaigns for technique and effectiveness. Students will also develop their own advertising campaigns.
Prerequisite: COM 311 or permission of instructor.
Offered: every other year.

COM 412 Public Relations Case Studies **3 Credits**

Students will become familiar with a process for public relations problem-solving through analysis of a variety of PR case studies in major areas of the field, including employee relations, consumer relations, media relations and crisis communications. (ADV/PR sequence).
Offered: every other year.

COM 414 Issues in Integrated Marketing Communications **3 Credits**

In this Core Capstone seminar, students explore a range of contemporary issues in advertising, public relations and marketing communications (IMC). They include: consumerism, social effects, privacy and social media, sexual and minority portrayals, political communication, messaging, and more. These are viewed against ethical, justice, global and diversity attributes. Recommend COM/ADV, COM/PR or MKT background.
Restriction: senior standing.
Fulfills College Core: Core Capstone
Offered: fall & spring.

COM 415 Partnerships and the Not-for-Profit Organization **3 Credits**

Growing and strengthening our non-profit organizations through partnerships is one of the most important strategies available to organizational leaders today. Say the word 'collaboration' and everyone knows it is code for innovation, inspiration, new funding sources and a great deal of hard work. In this course, we will blend practice and theory to gain a deeper understanding and mastery of the process of collaboration. During our time together, we will use the power of our own partnership success stories and lessons learned in order to weave together key content areas of communication, collaboration and leadership in the non-profit.
Offered: spring of even-numbered years.

COM 416 Fund Raising and Development at Not-for-Profit Organizations **3 Credits**

This course will introduce students to the principles and practices of fundraising and long-term development planning in the not-for-profit organization. Blended into each topic area is the professional code of ethics, advocacy and role and responsibilities. The course combines theory and practice by using case studies, in-class small group exercises, case writing, role plays and experience sharing.
Offered: every fall.

COM 418 Interviewing **3 Credits**

Examines the underlying principles of interviewing in professional, business, and research settings and research providing validation of these principles. Students develop skills in interviewing through class projects and in-class exercises. Students develop the ability to probe well, to avoid making unwarranted assumptions, and, accurately, to record information during interviews.
Offered: every other year.

COM 422 Public Relations Campaigns **3 Credits**

Designed as a capstone course for public relations students, this course examines PR campaigns as the concerted efforts of an organization to build socially responsible relationships by achieving research-based goals through the application of communication strategies and the measurement of outcomes. Students produce an actual campaign.
Prerequisite: COM 312 or permission of instructor.
Offered: every other year.

COM 478 Capstone Project **3 Credits**

This is an applied course that will expect students to create integrated marketing communication plans including media strategies, as well as develop complete creative concepts and tactics that will address those plans and media strategies. Students will produce portfolio pieces as outcomes. Students will demonstrate a working knowledge of how to construct a basic integrated marketing communication plan; demonstrate an understanding of what media are most appropriate for reaching specific targets; and demonstrate a working knowledge of how to create communication tactics that address specific marketing strategies and targets.
Offered: every spring.

COM 479 World Cinema **3 Credits**

Award-winning and critically acclaimed films from different countries and coultures are studied through weekly screenings and written logs. By examining cinema practices beyond Hollywood, student experience altermative ways of using the universal language of cinema to tell stories and express the human condition from other national and artistic perspectives. Also accepted for Art History major/minor credit.
Offered: every other year.

COM 488 Internship I Seminar **3-9 Credits**

Student experientially learns communication functions in compatibly matched professional setting, locally or out-of- town. Faculty and on-site supervision. Seminar required. Pass/fail. May be repeated as COM 498; 12-credit limit for COM 488 and COM 498 combined. Information about the internship application process is available on the Communication Studies Department website.
Prerequisite: junior or senior standing, minimum overall GPA of 2.50, minimum communication studies average of 2.70, & approval by department faculty. **Restriction:** must be COM major.
Offered: every semester.

COM 491 Video Institute I **3 Credits**

Students are immersed in the development and creation of original video/film projects, which may take the form of a service-oriented video for a non-profit organization or a social documentary. May be repeated as COM 492.
Offered: every other year.

COM 492 Video Institute II **3 Credits**

Sequel to COM 491. Students are immersed in the development and creation of original video/film projects, which may take the form of a service-oriented video for a non-profit organization or a social documentary.
Prerequisites: COM 491
Offered: every other year.

COM 498 Internship II Seminar **3-9 Credits**
Sequel to COM 488 for students taking multiple internships. Each student is limited to a combined total of 12 credit hours for COM 488 and COM 498. **Prerequisite:** junior or senior standing, minimum overall GPA of 2.50, minimum communication studies average of 2.70, & approval by department faculty. **Restriction:** must be COM major.
Offered: every semester.

COM 499 Independent Study **3 Credits**
Student conducts original project or self-designed course of study under the tutelage of Communication Studies faculty member. Offered only in very specific circumstances. Independent studies require an application and approval by the associate dean.
Prerequisite: junior or senior standing; & permission of instructor, chair, & associate dean. **Restriction:** must be COM major.

Computer Science (BS)

Chair: Jeffrey J. McConnell, PhD

Introduction

A degree in computer science from Canisius College provides you with the experience and background required to continue with graduate school or to find employment in a variety of fields. Our graduates enjoy challenging and lucrative careers all over the country in many types of companies, from banking to the defense industry, from startups to major corporations. The computer science major provides you with an essential theoretical background along with practical programming experience and knowledge about many of the important and cutting edge areas of computer science, including cybersecurity, artificial intelligence, web development, software engineering, databases, operating systems, distributed computing, programming language design, and the social impact of computing.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Computer Science website (https://www.canisius.edu/academics/programs/computer-science/).

Qualifications

Students must maintain a 2.0 GPA in the major and a 2.0 overall average to graduate with a degree in Computer Science.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

In the past, Computer Science majors have had double majors in many other areas, including Physics (p. 210), Mathematics (p. 190), Digital Media Arts (p. 134), Religious Studies (p. 233), English (p. 139), and Classics (p. 111).

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Students following the Interdisciplinary Track are required to complete a minor outside of computer science. A double major also satisfies this requirement. Students in the Science Track are not required to complete a minor but may choose to do so.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
CSC 112 & 112L	Data Structures and Data Structures Laboratory	4
CSC 213 & 213L	Large Scale Programming and Large Scale Programming Laboratory	4
CSC 253 & 253L	Computer Hardware and Computer Hardware Laboratory	4
CSC 281 & 281L	Automata and Algorithms and Automata and Algorithms Lab	4

CSC 310 & 310L	Information Organization and Processing and Information Organization and Processing Laboratory	4
CSC 320	The Social Impact of Computing	3
CSC 330 & 330L	Distributed Computing and Distributed Computing Laboratory	4
CSC 351 & 351L	Comparative Programming Languages and Comparative Programming Languages Laboratory	4
CSC 360 & 360L	Intelligent Systems and Intelligent Systems Laboratory	4
CSC 395 & 395L	Software Engineering and Software Engineering Lab	4
Major Elective at the 300- or 400-level (see list below)		3-4
MAT 111	Calculus I	4
MAT 191	Introduction to Discrete Mathematics	4
or MAT 230	Logic, Set Theory, and Proofs	
Completion of either the science track or interdisciplinary track curriculum (variable credit required)		
Total Credits		54-55

Major Elective Options

One additional course at the 300/400 level is required. These courses cover a variety of topics including web programming, advanced object oriented programming and design patterns, cryptography, app development, graphics, numerical analysis and bioinformatics. All these courses are either 3 or 4 credits. Faculty teach these courses on a rotating basis. To determine what is offered each semester consult the class schedule. Recent major electives include:

Code	Title	Credits
CSC 371 & 371L	Cybersecurity Principles and Cybersecurity Principles Lab	4
CSC 380 & 380L	Web Development and Web Development Laboratory	4
CSC 400 & 400L	Special Topics in Computing and Special Topics in Computing Laboratory	4
MAT 341	Numerical Analysis	3

Tracks

Students must complete one of the following two tracks:

Interdisciplinary Track

Completion of an approved major or minor in another department or program.

Science Track

Code	Title	Credits
MAT 112	Calculus II	4
Select one of the following sequences:		8
Biology Sequence:		
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	
Chemistry Sequence:		
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory [1]	
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	
Physics Sequence:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	
Select one of the following math courses:		3-4
MAT 141	Inferential Statistics and Computers for Science	
MAT 219	Linear Algebra	
MAT 351	Probability & Statistics I	
Total Credits		15-16

[1] Students can complete CHM 109 and CHM 110 in lieu of CHM 111.

Many courses at the 300-level and above are offered every two years on a rotating schedule. Thus, some students will take, for example, CSC 330 in their junior year, while the students who entered the previous year will take CSC 330 in their senior year.

The CSC department maintains a lab for use by majors and minors that contains a number of computers that provide access to departmental and college-wide software along with a printer.

CSC majors often get part-time jobs or paid internships in the Western New York region while still taking classes, though we do not formally require an internship. CSC 497 “Internship” is a way to earn credit for an internship, but the experience must include a significant learning component that does not overlap with required coursework and must be pre-approved by the department chair. The Internship cannot count as the CSC elective.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
CSC 111 & 111L	CSC 112 & 112L
MAT 111 or 191	Track course
Sophomore	
Fall	**Spring**
CSC 213 & 213L	CSC 281 & 281L
CSC 253 & 253L	Track course
Take one of the following MAT courses as needed:	MAT 110 (If needed)
MAT 111 or 109	
MAT 191	
Junior	
Fall	**Spring**
Select one:	CSC 330 & 330L
CSC 310 & 310L	Track course

CSC 320	CSC elective (1 needed)
Track course	
CSC Elective (1 needed)	

Senior

Fall	**Spring**
CSC 395 & 395L	CSC 351 & 351L
Track course	CSC elective (1 needed)
Select one:	Track course, if needed
CSC 310 & 310L	
CSC 320	

Learning Goals & Objectives

Student Learning Goal 1

Majors will develop a computational solution to a problem.

Students will:

- Objective A: Translate a problem description to a formal representation;
- Objective B: Implement, justify and test acceptable computational solutions;
- Objective C: Describe the basic principles of artificial intelligence (AI).

Student Learning Goal 2

Majors will know the foundations of computing.

Students will:

- Objective A: Identify computational power and its limits;
- Objective B: Describe the operational details of computer systems;
- Objective C: Describe the operational details of programming languages.

Student Learning Goal 3

Majors will understand the social impact of computing.

Students will:

- Objective A: Describe the social impact of computing.

Minors

The following two minors are offered:

- Computer Science Minor (p. 129)
- Computer Theory Minor (p. 129)

Courses

CSC 108 Introduction to Web Computing **3 Credits**
Introduction to computer science through web sites, web pages, web page programming, HTML, XML, CSS and JavaScript. The history and social impact of computers, networks and the World Wide Web are included in the course.
Corequisite: CSC 108L.
Fulfills College Core: Ethics, Field 7 (Mathematical Sciences)
Offered: fall & spring.

CSC 108L Introduction to Web Computing Laboratory **1 Credit**
Required lab for CSC 108.
Corequisite: CSC 108.

CSC 111 Introduction to Programming **3 Credits**
Algorithms, programming, computers, and applications to problem solving in Python.
Corequisite: CSC 111L.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: every fall, spring, & summer.

CSC 111L Introduction to Programming Laboratory **1 Credit**
Required lab for CSC 111.
Corequisite: CSC 111.

CSC 112 Data Structures **3 Credits**
Basic concepts of object-oriented programming, recursion, and data structures, including lists, stacks, queues, and trees using Python.
Prerequisite: minimum grade of C in CSC 111 & CSC 111L. **Corequisite:** CSC 112L.
Offered: every fall, spring, & summer.

CSC 112L Data Structures Laboratory **1 Credit**
Required lab for CSC 112.
Prerequisite: minimum grade of C in CSC 111 & CSC 111L. **Corequisite:** CSC 112.
Offered: every spring.

CSC 213 Large Scale Programming **3 Credits**
Introduction to the design, implementation, and testing of larger software systems. Intensive instruction in Java including graphics and object-oriented design.
Prerequisite: minimum grade of C in CSC 112 & CSC 112L. **Corequisite:** CSC 213L.
Offered: once a year.

CSC 213L Large Scale Programming Laboratory **1 Credit**
Required lab for CSC 213.
Prerequisite: minimum grade of C in CSC 112 & CSC 112L. **Corequisite:** CSC 213.
Offered: once a year.

CSC 253 Computer Hardware **3 Credits**
Introduction to digital logic, Boolean algebra, hardware and computer organization. Overview of current architectures.
Prerequisite: minimum grade of C in CSC 111 & CSC 111L. **Corequisite:** CSC 253L.
Offered: once a year.

CSC 253L Computer Hardware Laboratory **1 Credit**
Required lab for CSC 253.
Prerequisite: minimum grade of C in CSC 111 and CSC 111L. **Corequisite:** CSC 253.
Offered: once a year.

CSC 281 Automata and Algorithms **3 Credits**
Formal language theory including finite and pushdown automata, grammars, Turing Machines and the Halting Problem. Provides an introduction to the design and analysis of algorithms, including classes of problems and methods for analysis.
Prerequisite: minimum grade of C in CSC 112 & CSC 112L. **Corequisite:** CSC 281L.
Offered: every spring.

CSC 281L Automata and Algorithms Lab **1 Credit**
Required lab for CSC 281.
Prerequisites: Minimum grade of C in CSC 112 and CSC 112L. **Corequisite:** CSC 281.
Offered: every spring.

CSC 310 Information Organization and Processing **3 Credits**
Databases, high-level organization and processing of information, SQL, and modern NOSQL systems.
Prerequisite: minimum grade of C in CSC 112 & CSC 112L or or minimum grade of C in CSC 213 & CSC 213L. **Corequisite:** CSC 310L.
Offered: every fall & spring.

CSC 310L Information Organization and Processing Laboratory **1 Credit**
Required lab for CSC 310.
Prerequisite: minimum grade of C in CSC 112 and CSC 112L or minimum grade of C in CSC 213 & CSC 213L. **Corequisite:** CSC 310.
Offered: occasionally.

CSC 320 The Social Impact of Computing **3 Credits**
Examines the societal issues involved in computing such as accessibility, ethical issues, privacy, censorship, social media, and professional responsibilities. Includes applications of information literacy techniques to the major.
Prerequisite: minimum grade of C in CSC 112 & CSC 112L or or minimum grade of C in CSC 213 & CSC 213L. **Corequisite:** CSC 320L.
Fulfills College Core: Advanced Writing-Intensive
Offered: once a year.

CSC 330 Distributed Computing **3 Credits**
The design of operating system software, distributed applications, client/server and other models, security issues, and parallel programming on a High Performance Computing Cluster.
Prerequisite: CSC 253, CSC 253L, & either minimum grade of C in CSC 112 & CSC 112L or minimum grade of C in CSC 213 & CSC 213L. **Corequisite:** CSC 330L.
Offered: 2019-2020, 2021-2022.

CSC 330L Distributed Computing Laboratory **1 Credit**
Required lab for CSC 330.
Prerequisite: CSC 253, CSC 253L, & (minimum grade of C in CSC 112 & CSC 112L or or minimum grade of C in CSC 213 & CSC 213L). **Corequisite:** CSC 330.
Offered: occasionally.

CSC 351 Comparative Programming Languages **3 Credits**
A study of programming languages and their implementations. Programming in logical and functional programming languages is included.
Prerequisite: minimum grade of C in CSC 112 & CSC 112L or minimum grade of C in CSC 213 & CSC 213L. **Corequisite:** CSC 351L.
Offered: 2020-2021, 2022-2023.

CSC 351L Comparative Programming Languages Laboratory **1 Credit**
Required lab for CSC 351.
Prerequisites: minimum grade of C in CSC 112 and 112L or minimum grade of C in CSC 213 & CSC 213L. **Corequisite:** CSC 351.
Offered: spring of odd-numbered years.

CSC 360 Intelligent Systems **3 Credits**
An introduction to intelligent systems including logic and rule-based systems, machine learning, and applications of AI.
Prerequisite: completion of MAT 191 or MAT 230 and minimum grade of C in either CSC 112 & CSC 112L or CSC 213 & CSC 213L. **Corequisite:** CSC 360L.
Offered: 2020-2021, 2022-2023.

CSC 360L Intelligent Systems Laboratory **1 Credit**
Required lab for CSC 360.
Prerequisite: completion of MAT 191 or MAT 230 and minimum grade of C in either CSC 112 and 112L or in CSC 213 & CSC 213L. **Corequisite:** CSC 360.
Offered: occasionally.

CSC 371 Cybersecurity Principles **3 Credits**
This course examines the landscape and the broad areas of cybersecurity which includes topics such as: Symmetric & Public-Key Encryption, Access Control, Database Security, Malware, DoS (Denial-of-Service) Attacks, Intrusion Detection & Firewalls, Software Security, Security Management & Policies, Internet Security, and Legal & Ethical Aspects of Cybercrime. Students will also complete hands-on labs and exercises to reinforce their working knowledge of computer, network and information security topics.
Prerequisite: CSC 310 and CSC 310L; may be taken concurrently.
Corequisite: CSC 371L.
Offered: every fall.

CSC 371L Cybersecurity Principles Lab **1 Credit**
Required lab for CSC 371.
Prerequisite: CSC 310 and CSC 310L; may be taken concurrently.
Corequisite: CSC 371.
Offered: occasionally.

CSC 380 Web Development **3 Credits**
Web design principles, programming and scripting (both client-side and server-side), client/server mechanisms, search engines, and security.
Prerequisite: minimum grade of C in CSC 111 & CSC 111L. **Corequisite:** CSC 380L.
Offered: 2020-2021, 2022-2023.

CSC 380L Web Development Laboratory **1 Credit**
Required lab for CSC 380.
Prerequisite: minimum grade of C in CSC 111 and 111L. **Corequisite:** CSC 380.

CSC 391 Computer Science Junior Seminar **1 Credit**
Topic-focused exploration involving students and faculty.
Prerequisite: permission of instructor.

CSC 395 Software Engineering **3 Credits**
An examination of a variety of techniques and concepts that have been created to improve the software production process. Includes discussions of software processes, Agile software development, requirements engineering, testing, and software evolution.
Prerequisite: minimum grade of C in CSC 213 & CSC 213L. **Corequisite:** CSC 395L.
Offered: 2020-2021, 2022-2023.

CSC 395L Software Engineering Lab **1 Credit**
Required lab for CSC 395.
Prerequisite: minimum grade of C in CSC 213 and 213L**Corequisite:** CSC 395.

CSC 400 Special Topics in Computing **3 Credits**
Current topics of interest to faculty and students. Possible topics: cryptography, advanced scripting languages, networking, etc.
Prerequisite: minimum grade of C in either CSC 112 & CSC 112L or in CSC 212 & CSC 212L and in either MAT 111, MAT 191 or MAT 230. **Corequisite:** CSC 400L. **Restriction:** must be junior or senior Computer Science major.
Offered: 2019-2020, 2021-2022.

CSC 400L Special Topics in Computing Laboratory **1 Credit**
Required lab for CSC 400.
Prerequisites: minimum grade of C in either CSC 112 & CSC 112L or in CSC 212 & CSC 212L and in either MAT 111, MAT 191 or MAT 230. **Corequisite:** CSC 400. **Restriction:** must be junior or senior Computer Science major.
Offered: every spring.

CSC 480 Research Experience **0 Credits**
Research project done in conjunction with a faculty advisor.
Offered: every fall & spring.

CSC 481 Research Experience **1 Credit**
Research project done in conjunction with a faculty advisor for credit.
Offered: every fall & spring.

CSC 491 Computer Science Senior Seminar **1 Credit**
Topic-focused exploration involving students and faculty.
Prerequisite: permission of instructor.

CSC 497 Internship **1-3 Credits**
Special projects for local institutions/businesses. Must be related to a specific focused task and involve a significant learning component. Internships require an application and approval by the associate dean. Credit is not given simply for a part-time job. Approved project proposal and results documentation required. Does not count as a CSC elective.
Prerequisite: permission of chair & associate dean.

CSC 498 Independent Project **3 Credits**
A directed project course that includes research, design, and implementation of a software system.
Prerequisite: permission of instructor.

CSC 499 Independent Study **1-4 Credits**
An in-depth study of a specific computing topic. Independent studies require an application and approval by associate dean.
Prerequisite: junior or senior standing; & permission of instructor, chair, & associate dean.

Computer Science Minor

This minor is only available to students who are not majoring in computer science.

Curriculum

Code	Title	Credits
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
CSC 112 & 112L	Data Structures and Data Structures Laboratory	4
CSC 213 & 213L	Large Scale Programming and Large Scale Programming Laboratory	4
One course at the 300 or 400 level, chosen after consulting with an advisor		3-4
One additional Computer Science course		3-4
Total Credits		18-20

Computer Theory Minor

This minor is only available to students who are not majoring in computer science.

Curriculum

Code	Title	Credits
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
CSC 112 & 112L	Data Structures and Data Structures Laboratory	4
CSC 281 & 281L	Automata and Algorithms and Automata and Algorithms Lab	4
MAT 191	Introduction to Discrete Mathematics	4
or MAT 230	Logic, Set Theory, and Proofs	
Total Credits		16

Digital Information and Applications Minor

The Applied Digital Studies Minor requires a **total of 6 courses or 5 courses plus an internship or research project.** Please note, a minimum of one half of the courses taken must be courses not counted within the student's major (particularly applies to Computer Science and Economics students). In addition, the optional internship or research project may be done after at least 4 courses in the minor are complete, and the research project must use methods from the minor.

Curriculum

Code	Title	Credits
CSC 111 & CSC 110L	Introduction to Programming and Intro to Computing Lab	3
Select one of the following statistical courses:		3-4
ECO 255	Business Statistics	
MAT 131	Statistics for Social Sciences	
MAT 141	Inferential Statistics and Computers for Science	
MAT 351	Probability & Statistics I	
Select one course from the Math, Science, and Logic electives listed below		3-4
Select one course from the Application of Technology electives listed below		3
One additional elective from either group of electives		3
Choose one of the following		0-3
One additional course from either group of electives		
CSC 480	Research Experience	
CSC 481	Research Experience	
CSC 497	Internship	1-3
Total Credits		16-23

Math, Science, and Logic Electives (select at least one course)

Code	Title	Credits
CSC 112	Data Structures	3
CSC 310	Information Organization and Processing	3
ECO 310	Introduction to Geographic Information Systems	3
ECO 256	Business Analytics	3
ECO 312	GIS and Spatial Economics	3
MAT 191	Introduction to Discrete Mathematics	4
MAT 219	Linear Algebra	4
MAT 352	Probability & Statistics II	3
PHI 225	Logic	3
SOC 315	Geographical Information Systems (GIS) for the Social Sciences	3

Application of Technology Electives (select at least one course)

Code	Title	Credits
CSC 108	Introduction to Web Computing	3
CSC 310	Information Organization and Processing	3

CSC 320	The Social Impact of Computing	3
DMA 201	Introduction to Digital Media	3
DMA 217	Interaction Design	3
DMA 365	Designing for Mobile Devices	3
DMA 370	Designing for Mobile Devices	3
DMA 442	Advanced Web Design	3
PHI 246	Ethics of Technology	3
PHI 221	Critical Thinking	3

Roadmap

This minor can be useful for various majors. For example, a student majoring in history may be interested in pursuing a field of study in forming and maintaining databases. An English major may be interested in pursuing a career in web-based media. The following roadmaps provide examples of courses that would be useful for students in these majors.

The following roadmaps are provided as examples based on different majors and courses of study. Students interested in the minor are strongly encouraged to speak with Dr. David Sheets, the coordinator of the program, for an individualized plan.

History Major Sample Roadmap

Sophomore

Fall	Spring
CSC 111 & 111L	CSC 112 & 112L

Junior

Fall	Spring
MAT 131	CSC 310 & 310L

Senior

Fall	Spring
PHI 225	PHI 246

English Major Sample Roadmap

Sophomore

Fall	Spring
MAT 131	PHI 225

Junior

Fall	Spring
CSC 111 & 111L	DMA 201

Senior

Fall	Spring
DMA 442	CSC 108 & 108L

Criminal Justice (BS)

Introduction

Criminal justice is the study of criminal law, criminal procedure, and the enforcement of criminal law. It includes understanding the social context of criminal behavior and the way society upholds social control and sanctions those who violate the criminal law. The major is grounded in a liberal arts curriculum; it emphasizes not only how the criminal justice system has developed in its present form, but also how changes in the system affect other parts of society. The major prepares students for a broad spectrum of occupations, including law enforcement, corrections, and allied mental health. Finally, students who wish to pursue careers as lawyers can major in criminal justice and also take advantage of the college's Pre-Law program. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Criminal Justice website (https://www.canisius.edu/academics/programs/criminal-justice/).

Qualifications

Students must have a minimum grade of C in all required courses and maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Criminal Justice.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students should consult with Dr. Kathleen M. Contrino, Director of Criminal Justice, for current advisement information.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Many of the department's majors combine criminal justice with a second major in another discipline, such as sociology, psychology, political science, history, modern languages or communication studies.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum
Curriculum

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All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
MAT 131	Statistics for Social Sciences	3
or PSY 201	Basic Statistics for Behavioral Sciences	
SOC 110	Introduction to Sociology	3
Select one of the following		3
SOC 342	Quantitative Research Methods	
ANT 351	Qualitative Research Methods	
HSV 303	Research Methods in the Social Sciences	
CRJ 227	Criminal Justice I	3
CRJ 228	Criminal Justice II	3
CRJ 250	Criminal Law and Procedure	3
CRJ 325	Restorative Justice and the Administration of Justice	3
CRJ 382	Criminal Justice Ethics	3
CRJ 455	Criminology	3
Criminal Justice Electives (select 3 from list below) [1]		9
CRJ 461	Criminal Justice Senior Exam	0
Total Credits		36

[1] Students may choose to follow a specific concentration within the major. We currently offer the following optional concentrations: environmental regulation and justice track, law enforcement, law and justice, and corrections. Concentrations will appear on the student's transcript. The requirements for these concentrations are below.

Criminal Justice Electives

Students must take three Criminal Justice electives. Students may use any additional Criminal Justice (CRJ) course or any of the following courses as electives for the criminal justice major and minor:

Code	Title	Credits
ANT 310	Codebreaking	3
ANT 333	Forensic Anthropology	3
ISB 460	Computer Forensics	3
PSC 103	The American Constitution	3
PSC 320	American Constitutional Law I	3
PSC 321	American Constitutional Law II	3
PSC 345	Transnational Crime After 9/11	3
PSC 420	The Constitution, The War on Terror and Civil Liberties	3
PSY 303	Abnormal Psychology [1]	3
PSY 360	Psychology and Law [1]	3
SOC 315	Geographical Information Systems (GIS) for the Social Sciences	3
SOC 340	Sociology of the City	3
SOC 355	Deviant Behavior	3

[1] This course will count as an elective for dual psychology/criminal justice majors.

Optional Criminal Justice Concentrations

Environmental Justice and Regulation

Students who double major in Environmental Studies (EVST) and Criminal Justice (CRJ) should follow this concentration when selecting their electives.

Code	Title	Credits
Students select 5 of the following:		15
CRJ 358	Green and White Collar Crime	
EVST 250	Nature, Culture and Interpretation	
EVST 235	Environmental Policy	
EVST 275	Global Environmental Problems	
EVST 498	Internship	
PHI 244	Environmental Ethics	
PHI 245	Animal Ethics	
PHI 264	Justice & the Environment: The Problem of Climate Change	
PSY 329	Leadership and Motivation	
SOC 234	Environment and Society	
SOC 273	Social Movements and Social Change	
SOC 315	Geographical Information Systems (GIS) for the Social Sciences	
or ECO 310	Introduction to Geographic Information Systems	
SOC 340	Sociology of the City	
Total Credits		15

Law Enforcement

Code	Title	Credits
Select 5 of the following:		15
CRJ 336	Drug Treatment Courts	
CRJ 337	Violence and the Family	
CRJ 345	Gangs in American Society	
CRJ 351	Police and the Community	
CRJ 354	Juvenile Delinquency	
CRJ 356	Treatment of Offenders	
CRJ 358	Green and White Collar Crime	
CRJ 365	Criminalizing the Mentally Ill	
CRJ 385	Death Penalty: Law and Policy	
CRJ 498	Criminal Justice Internship	
RST 340	Moral Issues Today	
SOC 355	Deviant Behavior	

PSC 345	Transnational Crime After 9/11	
Total Credits		15

Law and justice

Code	Title	Credits
Select 5 of the following:		15
CRJ 280	Language for Legal Professions	
CRJ 336	Drug Treatment Courts	
CRJ 354	Juvenile Delinquency	
CRJ 358	Green and White Collar Crime	
CRJ 365	Criminalizing the Mentally Ill	
CRJ 385	Death Penalty: Law and Policy	
CRJ 498	Criminal Justice Internship	
PHI 240	Justice	
PSC 103	The American Constitution	
PSC 320	American Constitutional Law I	
PSC 321	American Constitutional Law II	
PSC 420	The Constitution, The War on Terror and Civil Liberties	
PSY 360	Psychology and Law	
Total Credits		15

Corrections: Including Probation, Social Work and Juvenile Court

Code	Title	Credits
Select 5 of the following:		15
ANT 310	Codebreaking	
ANT 333	Forensic Anthropology	
CRJ 300	Special Topics in Criminal Justice	
CRJ 336	Drug Treatment Courts	
CRJ 337	Violence and the Family	
CRJ 345	Gangs in American Society	
CRJ 354	Juvenile Delinquency	
CRJ 356	Treatment of Offenders	
CRJ 365	Criminalizing the Mentally Ill	
CRJ 498	Criminal Justice Internship	
HSV 100	Introduction to Human Services	
HSV 302	Children, Schools, and the Community	
HSV 360	People Helping Skills	
Total Credits		15

Criminal Justice and Psychology Double Major

Students double majoring criminal justice and psychology may satisfy the statistics and methods requirements with the following courses:

Code	Title	Credits
PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 202	Research Methods in Psychology	3

Internships

Many internship opportunities upon approval are available to qualified juniors and seniors. As an urban center situated on the Niagara Frontier, Buffalo offers numerous internship experiences where students can explore careers and get valuable real life experience. A GPA of 3.0 of higher is required.

Foreign Language and Study Abroad

The department encourages criminal justice majors to study a foreign language of their choice and to participate in the college study abroad program.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
SOC 110	MAT 131 or PSY 201
Sophomore	
Fall	**Spring**
CRJ 227	CRJ 228
CRJ Elective	CRJ 250
Junior	
Fall	**Spring**
CRJ 382	CRJ 325
Select one of the following:	CRJ Elective
SOC 342	
ANT 351	
HSV 303	
Senior	
Fall	**Spring**
CRJ Elective	CRJ 455

Learning Goals & Objectives

Student Learning Goal 1

Criminal Justice Majors will evaluate the administration of the criminal justice system within the context of ethics, global awareness, diversity and justice.

Students will:

- **Objective A:** Describe the organization and administration of the criminal justice system;
- **Objective B:** Identify issues in the criminal justice system as they relate to ethics, global awareness, diversity and justice.

Student Learning Goal 2

Criminal Justice majors will be able to demonstrate that they have the knowledge and skills necessary to become *scholar-servant-leaders* in the criminal justice community.

Students will:

- **Objective A:** Evaluate and critique systems and policies in the criminal justice system terms of justice;
- **Objective B:** Apply social science research and ethics to criminology and the administration of the criminal justice system.

Student Learning Goal 3

Criminal Justice majors will become information literate within the context of criminology and the administration of the criminal justice system.

Students will:

- **Objective A:** Evaluate appropriate information within the context of criminology and the administration of the criminal justice system;

- **Objective B:** Analyze how ethical principles and ethical codes of conduct apply to criminal justice professionals;
- **Objective C:** Synthesize criminology and information with the administration of criminal justice systems.

Minors

Two minors are housed in Criminal Justice:

- Criminal Justice Minor (p. 134)
- Inter-Disciplinary Minor in Computer Forensics (p. 134) (co-administered with the Marketing Program)

Courses

CRJ 227 Criminal Justice I **3 Credits**
Focuses on the nature and extent of crime, policing, and court system including constitutional rights and trial process.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall.

CRJ 228 Criminal Justice II **3 Credits**
Examines sentencing, corrections, juvenile court, drug court, and global crime issues.
Offered: spring.

CRJ 250 Criminal Law and Procedure **3 Credits**
The substantive criminal law, including offenses against persons, property and public morality with emphasis on New York State Penal Law. Criminal responsibility and defenses. In addition key Supreme Court decisions on the criminal justice related constitutional amendments (4th, 5th, 6th and 8th amendments). Finally, Appeals and post-conviction relief will be discussed.
Prerequisite: CRJ 227.
Offered: every spring.

CRJ 280 Language for Legal Professions **3 Credits**
Explores the use of language in the administration of law, including ways to read and brief cases and to read statutes.
Fulfills College Core: Justice, Oral Communication
Offered: spring.

CRJ 300 Special Topics in Criminal Justice **3 Credits**
Critical examination of a selected topic in criminal justice. Subject matter determined by the instructor.

CRJ 325 Restorative Justice and the Administration of Justice **3 Credits**
Examination into issues of race, gender and social class in criminal justice policies and professional discretion. Restorative justice practices will be explored to mitigate the harm to society from discriminatory practices in the administration of justice.
Prerequisite: CRJ 227 and CRJ 228.
Offered: every spring.

CRJ 330 Current Issues in Forensic Psychology **3 Credits**
Application of the science of psychology to questions and issues relating to criminal law and the criminal justice system. Topics discussed include competency to stand trial, assessment of mental state for an insanity plea, and prediction of violence and assessment of risk.
Prerequisites: CRJ 227 and CRJ 228.
Offered: spring.

CRJ 336 Drug Treatment Courts **3 Credits**
Examination of drug prohibition and the administration of diversional treatment courts and other treatment of drug offenders.
Offered: occasionally.

CRJ 337 Violence and the Family **3 Credits**
How family dynamics can contain elements that give rise to violence, including 'battered women' and abused children.
Offered: fall & spring.

CRJ 345 Gangs in American Society **3 Credits**
Examines the theoretical causes for the growth of gangs; including youth and criminal gangs. Topics include the social theories, measurement, and solutions.

CRJ 350 Policy Issues in the Administration of Criminal Justice **3 Credits**
Critical examination of a selected policy related to criminal justice phenomenon. Subject matter determined by the instructor.
Prerequisite: None.
Offered: every spring.

CRJ 351 Police and the Community **3 Credits**
Critical examination of the operation of all levels of law enforcement in America. Topics include the selection process, training, ethics, and police accountability.

CRJ 354 Juvenile Delinquency **3 Credits**
Legal processes in juvenile delinquency as well as understanding and analysis of current practices and historic and contemporary issues. Suggested programs for rehabilitation and prevention of delinquency.

CRJ 356 Treatment of Offenders **3 Credits**
Correction theory, offender typologies, and nature and diagnosis of offenders and future trends in dealing with criminal offenders.

CRJ 358 Green and White Collar Crime **3 Credits**
Crimes committed by 'respectable people' in positions of responsibility in private or public sector as well as environmental crimes committed n the private and public sector. Nature of these crimes, how regulatory bodies and legal systems treat these criminals and how they seek to avoid detection and prosecution.
Offered: occasionally.

CRJ 359 Women and Crime **3 Credits**
Classical and contemporary accounts of the etiology of female crime, patterns of female criminal behavior, and the role and treatment of women in the criminal justice system.

CRJ 365 Criminalizing the Mentally Ill **3 Credits**
This course examines the legal and policy issues regarding the practice of criminalization of persons with mental illness. Topics investigated include the history of criminalization of persons with mental illness, constitutional issues, law enforcement responses to persons with mental illness, mentally ill offenders in jails and prisons, civil commitment, mental health courts and community supervision strategies.
Offered: occasionally.

CRJ 382 Criminal Justice Ethics **3 Credits**
The personal, social and criminal justice contexts for understanding justice, crime and ethics. Skills necessary to deal effectively with ethical issues in criminal justice systems. Problems and case studies for active exploration of social issues.
Prerequisite: CRJ 227 and CRJ 228.
Fulfills College Core: Ethics
Offered: fall.

CRJ 385 Death Penalty: Law and Policy **3 Credits**
This course examines the major legal and policy issues relating to the practice of the death penalty in the United States. Topics investigated include the history of the death penalty in the United States, the constitutional limits on the types of crimes and criminals for which the death penalty is permitted, and contemporary controversies regarding the death penalty including potential innocence, special populations, methods of execution, race and gender biases.
Offered: occasionally.

CRJ 386 Comparative Criminal Justice Systems **3 Credits**
Examines criminal justice systems across the globe including their historical significance and policy implications. Students will also analyze international and transnational crimes within the context of globalization. Students will understand diversity by analyzing similarities and differences across criminal justice systems within the broad categories of policing, legal institutions and correctional structures.
Prerequisite: CRJ 227.
Offered: every fall & spring.

CRJ 455 Criminology **3 Credits**
Classical and contemporary theories of criminal behavior and the role of theory in the criminal justice system. Explanations for why crime occurs, understanding of criminal behavior and its impact on society. Students will be produce a policy analysis research paper that will explore criminal justice policies, criminal theory and justice theories.
Prerequisite: CRJ 227 and CRJ 228.
Fulfills College Core: Advanced Writing-Intensive, Justice
Offered: every fall & spring.

CRJ 461 Criminal Justice Senior Exam **0 Credits**
Students must take a senior exam before they graduate from the Criminal Justice Program with a Bachelors of Science. Students must have Senior Status and take the exam in their final semester before the last week of finals.
Offered: every spring.

CRJ 498 Criminal Justice Internship **3-15 Credits**
Opportunity for selected students to participate in daily work of law enforcement agencies, courts, law firms, and social service agencies. Students must apply the semester before they take the internship.
Prerequisite: minimum GPA of 3.0, junior or senior status, & signature of major advisor.
Offered: fall & spring.

CRJ 499 Independent Study **3 Credits**
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: fall & spring.

Criminal Justice Minor

The Criminal Justice minor is designed for students who have chosen another academic major (e.g. Psychology, Political Science) but who may have an academic and/or career interest in the area of criminal justice. Five courses are required. The two Criminal Justice electives can be chosen from any of the Criminal Justice Electives (p. 130) offerings, with at least one course at the 300- or 400-level.

The following courses are required for the Criminal Justice minor:

Code	Title	Credits
SOC 110	Introduction to Sociology	3
CRJ 227	Criminal Justice I	3
CRJ 228	Criminal Justice II	3
Criminal Justice Elective (at any level)		3
Criminial Justice Elective (at the 300- or 400-level)		3
Total Credits		15

Interdisciplinary Minor in Computer Forensics

Computer forensics is the science of acquiring, preserving, retrieving and presenting data that has been processed electronically and stored on various types of electronic media including, E-mail and instant message (IM), cellular phones and digital cameras, tablet computers, GPS devices and the Internet.

Computer forensics is appropriate for students interested in a career in information security, criminal justice, forensic accounting, law enforcement, or federal investigations—as well as computer forensics investigations for defense and plaintiff lawyers.

This is a multi-disciplinary minor designed for students who have chosen any academic major in either the School of Arts & Sciences or School of Business, but who may have an academic or career interest in computer forensics.

Required Courses

Code	Title	Credits
CRJ 227	Criminal Justice I	3
CRJ 228	Criminal Justice II	3
ISB 350	Computer and Network Security	3
ISB 460	Computer Forensics	3
ISB 470	Cyber Security	3
An ethics course:		3
CRJ 382	Criminal Justice Ethics	
or MGT 370	Managerial Environment	
Total Credits		18

Digital Media Arts (BS)

Director: Ben Dunkle, MFA

Introduction

The Digital Media Arts (DMA) program, offered through the Department of Communication, focuses on converging fields of digital design, animation, video and interactive media. DMA majors take a core set of courses and choose one or more concentrations to specialize in web design, graphic design, digital filmmaking and game design. Students often complete dual majors and minors that combine important cross-functional skill sets, including Communication, Business/Marketing, Computer Science, Fine Arts and others. For more information, please go to the DMA website (https://www.canisius.edu/academics/programs/digital-media-arts/).

Qualifications

Digital Media Arts majors must have a cumulative GPA of at least 2.00, including a minimum grade of C- in all digital media arts courses. It is expected that students in the program must have a GPA much higher

than 2.0 to continue as a DMA major and all majors are subject to review relative to their continuation in the program. Transfer students and students changing their major to DMA should meet with the program director to develop an appropriate course of action based on transferred courses, previous coursework and student's interests.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Digital Media Arts majors are assigned a Department of Communication faculty adviser in the fall of their freshman year.

A Unique Learning Environment

State-of-the-art facilities provide a 100% hands-on approach to learning. Students learn how to use cutting-edge software, including Adobe Creative Cloud, Final Cut Pro, Ableton Live, Maya, Mudbox, Unity game engine and a wide range of web development tools, including WordPress content management and blogging software — all running at with the most up-to-date versions available. Our HD (high definition) video equipment, green screen and media center allow student to create professional grade films and TV programs.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

IMPORTANT: Students should carefully examine the rules for dual majors in the department handbook (available in the department office).

Students interested in declaring double majors within the Department of Communication (Communication Studies (p. 118), Digital Media Arts (p. 134), Integrated Marketing Communication (p. 180), or Journalism (p. 186)) will be allowed to share a maximum of 9 credits between the two majors. This requires 24 distinct credits for communication studies, 27 distinct credits for digital media arts, 36 distinct credits for integrated marketing communication, and 24 distinct credits for journalism. Additionally, for students with a double major outside the Department of Communication, students may double count up to 9 credit hours of electives between the two majors. Please note, however, that the second major may not necessarily allow double counting of credits. For more information, please contact the department chair.

Learn Outside the Classroom

Students in the DMA program have numerous opportunities to engage in theoretical and applied research with faculty and third-party institutions. Our faculty is highly engaged in local community of designers, artists, developers and filmmakers, and as a result our students can take advantage of opportunities to learn and practice real-world skills and collaborate with professionals in their area of interest. Some of these opportunities include: Canisius College Video Institute, WordCamp Buffalo, Buffalo Game Space, DMA Student Club, Fusion Gaming Society, Communication Studies Internship Program, Canisius Earning Excellence Program, among others. For more information, please visit our Extended Learning Opportunities page (https://www.canisius.edu/academics/programs/digital-media-arts/digital-media-arts-extended-learning-opportunities/).

Internships

DMA students are encouraged to participate in at least one internship within their area of interest. All internships require prior approval and are available to juniors and seniors who meet the criteria. Internships are a culminating opportunity to apply the theory and skills developed in the classroom, in a real-world setting. Some examples of companies where Canisius students have interned are: WGR-55, Snyacor Inc., Moog Inc., Moore Wallace, Perfect Parallel, Chameleon Communications, Eastco Multimedia Solutions, Buffalo Science Museum, Daily Post, Buffalo Spree magazine, Traffic East Magazine, The Martin Group, Computers for Children Inc., among others.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

The Digital Media Arts degree in the Communication Studies Department focuses on design for web and print, video production/post-production, 3D modeling, animation, interaction and game design in a 13-course, 39-credit major. The program is organized into 4 concentrations to help students choose DMA elective courses that are most relevant to their area of study.

These concentrations are: graphic design, web design, digital filmmaking and game design. State-of-the-art facilities are featured at the Digital Media Arts' home in Lyons Hall. For more information, please visit the courses and curriculum section of the DMA website (http://www.canisius.edu/dma/courses/).

Code	Title	Credits
DMA 201	Introduction to Digital Media	3
DMA 212	2D Graphics	3
DMA 213	3D Graphics	3
DMA 214	Digital Design Concepts	3
DMA 215	Digital Media Culture	3
DMA 216	Digital Media Law	3
DMA 217	Interaction Design	3
DMA 218	Motion Graphics	3
Total Credits		24

Senior Project and Portfolio Requirement

Digital Media Arts majors are required to complete a Senior Project and Portfolio course before graduating from the program. Students register for the course with a professor's approval based on their progress in the major and chosen concentration. The following DMA electives fulfill this requirement for each of the concentrations:

Code	Title	Credits
Graphic Design		
DMA 363	Print Design	3
DMA 393	Advertising Design	3
Web Design		
DMA 370	Designing for Mobile Devices	3
DMA 442	Advanced Web Design	3
Digital Filmmaking		
DMA 399	Social Documentary (qualifies as Core Capstone)	3
Game Design		
DMA 450	Serious Games	3
DMA 354	Game Development	3

DMA Elective Courses by Concentration

In addition to DMA major requirements, students complete 5 courses in a given concentration, one of which fulfills Senior Project and Portfolio requirement. A number of courses from other programs such as Fine Arts Studio (FAS) or Communication Studies (COM) or Computer Science (CSC) count as DMA electives, however, at least 3 out of 5 electives have to have a DMA prefix (e.g. DMA 395 - Digital Illustration)

Graphic Design

Graphic design is in integral component of communication studies and digital media arts. It's how we present what we're trying to say. Talented and skilled graphic designers are in demand in a wide range of areas, including advertising/marketing industries, education institutions, athletics departments, corporations, and non-profits. As a student in this concentration, you will complete projects focusing on typography, color theory, layout, and illustration in a wide-ranging field of applications and formats. You'll become an expert in creativity-focused software such as Adobe Photoshop and Adobe Illustrator. You'll learn to be a creative problem solver, designing unique, engaging and visually dynamic solutions to complex problems. And you'll build a stunning portfolio that proves it.

For more information about Graphic Design concentration, please e-mail Professor Ben Dunkle (dunkleb@canisius.edu).

Graphic Design Courses

Code	Title	Credits
DMA Courses		
DMA 363	Print Design	3
DMA 384	Typography	3
DMA 395	Digital Illustration	3
DMA 393	Advertising Design	3
Qualified Non-DMA Courses		
COM 311	Principles of Advertising	3
COM 315	Advertising and the Creative Process	3
FAS 110	Two-Dimensional Design	3
FAS 130	Three-Dimensional Design	3
FAS 120	Drawing I	3
FAS 140	Introduction to Still Photography	3
FAS 150	Color	3
FAS 170	Studio Painting I	3
PHI 291	Philosophy of Art	3

Web Design

The web design concentration will equip students with the skills and understanding needed to succeed in a constantly evolving field. Fluency in front-end technologies such as HTML, CSS, JavaScript are supplemented with core design skills. Advanced topics include WordPress, PHP, MySQL, e-commerce, social media and server management. Graduates can expect to meet the growing industry demand for web designers with a degree, portfolio and resume uniquely positioned to help them succeed.

For more information about Web Design concentration, please e-mail Professor Ben Dunkle (dunkleb@canisius.edu).

Web Design Courses

Code	Title	Credits
DMA Courses		
DMA 342	Introduction to Web Design	3
DMA 370	Designing for Mobile Devices	3
DMA 442	Advanced Web Design	3
Qualified Non-DMA Courses		
CSC 108	Introduction to Web Computing	3
CSC 111	Introduction to Programming	3
CSC 380	Web Development	3
FAS 141	Digital Photography	3
ISB 455	ECommerce	3
ISB 470	Cyber Security	3

Digital Filmmaking

Advances in SRL, GoPro and 4K digital cinema cameras have brought filmmaking workflows to the computer lab. Digital Media Arts majors combine production skills of working with cameras, lighting, broadcast and audio equipment through the Digital Filmmaking Concentration. DMA filmmaking alums work as professional Independent Filmmakers, Commercial Video Producers, Editors, Motion Graphics and Special Effects Artists.

For more information about Digital Filmmaking concentration, please e-mail Professor Jamie O'Neil (oneilj@canisius.edu).

Digital Filmmaking Courses

Code	Title	Credits
DMA Courses		
DMA 385	Digital Filmmaking	3
DMA 387	Commercial Filmmaking & Video	3
DMA 399	Social Documentary	3
DMA 309	Music Technology	3
DMA 310	Digital Audio/Music Production	3
DMA 380	Social Media Production	
Qualified Non-DMA Courses		
COM 325	Media Literacy	3
COM 361	Introduction to TV Production	3
COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genres	3
COM 491	Video Institute I	3
COM 492	Video Institute II	3
ENT 201	Entrepreneurial Mind-Set and Foundations	3
SOC 324	Visual Sociology	3

Game Design

Why study game design? The video game industry has been driven by phenomenal technological innovation and creativity. It's a constantly growing field and is expanding into areas such as simulation (e.g. medical, sports and product simulations), advertising, training and education, moving well beyond pure entertainment. As a Digital Media Arts major concentrating in Game Design, you will learn game design theory and history, character design, character animation, level design and mobile game development, using cutting-edge, industry standard tools. Students are also encouraged to take courses in Fine Arts Studio to strengthen their artistic skills as well as in Computer Science to learn more about the programming aspect of game development.

For more information about Game Design concentration, please e-mail Dr. P.J. Moskal (moskalp@canisius.edu).

Game Design Courses

Code	Title	Credits
DMA Courses		
DMA 346	Video Games-History/Technique	3
DMA 347	Electronic Game Design	3
DMA 351	Game Level Design	3
DMA 352	Character Design	3
DMA 354	Game Development	3
DMA 355	Character Animation	3
DMA 371	Game Design for Mobile Devices	3
DMA 450	Serious Games	3
Qualified Non-DMA Courses		
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
CSC 112 & 112L	Data Structures and Data Structures Laboratory	4
CSC 360 & 360L	Intelligent Systems and Intelligent Systems Laboratory	4
FAS 120	Drawing I	3
FAS 131	Sculpture I	3
FAH 109	History of Architecture	3
PHI 291	Philosophy of Art	3

Learning Goals & Objectives

Student Learning Goal 1

Student portfolios will be relevant to the demands of the DMA industry and accessible

Students will produce work that is:

- Objective A: related to student's concentration;
- Objective B: accessible by target audience and presented professionally;

Student Learning Goal 2

Student portfolios will be of high quality

Student will produce work that:

- Objective A: exhibits technical prowess and digital skills with software or hardware;
- Objective B: is original and creative;

Courses

DMA 201 Introduction to Digital Media **3 Credits**
Introduces the fundamentals of digital systems and technologies through class lecture and hands-on approaches. Software and hardware used for web design, multimedia, video production, graphics and audio production.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: every fall & spring.

DMA 212 2D Graphics **3 Credits**
This course will familiarize students with techniques, file formats and applications for creation of 2D graphics. Students will develop digital image creation skills along with effective workflow habits.
Prerequisite: minimum grade of C- in DMA 201 or permission of instructor.
Offered: every spring.

DMA 213 3D Graphics **3 Credits**
This course is an introduction to digital 3D graphics for illustration, simulation, animation and game design. Students using Autodesk Maya, Mudbox and Unity game engine software will learn basic techniques of modeling, texturing, lighting and animation as they draw inspiration for their projects from the rich history of visual arts. This course is a perquisite for all 300 level production courses that are part of the Game Design concentration.
Prerequisite: minimum grade of C- in DMA 201 or permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: every spring.

DMA 214 Digital Design Concepts **3 Credits**
Introduces the conceptual, perceptual and manual skills in traditional graphic design. Topics include typography and visual communication, color theory, the principles of form, structure, spatial design and photo manipulation.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: on campus every fall, and online every summer.

DMA 215 Digital Media Culture **3 Credits**
Explores how digitization impacts our personal, business, cultural, institutional and international lives. Also examines the ways in which digital media transform communication and expression.
Fulfills College Core: Field 5 (Social Sciences)
Offered: every fall.

DMA 216 Digital Media Law **3 Credits**
Introduces a wide range of legal and ethical issues in cyberspace, including: the First Amendment, copyright, fair use, libel, hate speech, pornography, obscenity, privacy, commercial speech and national security.
Offered: every spring.

DMA 217 Interaction Design **3 Credits**
This course is an introduction to programming for designers using JavaScript and JavaScript based libraries such as JQuery, CreateJS and JavaScript for Unity game engine. Students will learn principles of Interaction Design and User-Centered Design to build interactivity into web pages for the purpose of advertising, training and entertainment.
Prerequisite: minimum grade of C- in DMA 201 or permission of instructor.
Offered: every fall.

DMA 218 Motion Graphics **3 Credits**
This course covers the fundamentals of key-frame based animation in Adobe After Effects. Students produce motion graphics for informational presentations, such as commercials and PSAs, as well as typographic effects and logo spins for movie trailers, video intros and promotional digital marketing projects.
Offered: every fall.

DMA 309 Music Technology **3 Credits**
Explore music sequencing, midi, audio plug-ins and other tools used by professional musicians, sound designers and multimedia specialists. No music background required.

DMA 310 Digital Audio/Music Production **3 Credits**
Learn fundamental techniques of digital audio and music production using current technologies in digital recording, software and audio post-production. Discuss current trends in audio production and the tools used for composing electronic music. No music background required.
Fulfills College Core: Field 3 (Literature and the Arts)

DMA 342 Introduction to Web Design **3 Credits**
Introduction to the state of the art, on-line multimedia publishing. Working individually and in teams, students learn to publish well-designed World Wide Web documents that communicate effectively.

DMA 346 Video Games-History/Technique **3 Credits**
This course provides an analytical and historical approach to the advancement of entertainment software. Encompassing cultural, professional, business, and scientific and technical evolution, the History of Video Games will communicate the socio-cultural impact of interactive entertainment on society.

DMA 347 Electronic Game Design **3 Credits**
This course covers the art, craft and business of creating electronic games. Develop your own game concept, learn the basics of interactive authoring and produce a storyboard. Emphasis is placed on understanding the gaming industry and the languages of game design.

DMA 351 Game Level Design **3 Credits**
Creating a game level takes planning, artistic and technical skill, user testing, and understanding of designer's vision. In this course students learn how to design game levels that provide challenges, support the story and are exciting to explore and interact with.
Prerequisite: minimum grade of C- in DMA 213 or permission of instructor.

DMA 352 Character Design **3 Credits**
This course is a comprehensive overview of 3D character design and development for games and simulations. Students start the process with concept sketches, then continue with modeling and rigging. The final result is an optimized, fully rigged character, ready for animation and real-time rendering in a game engine.
Prerequisite: minimum grade of C- in DMA 213 or permission of instructor.

DMA 354 Game Development **3 Credits**
This course is a hands-on overview of interactive techniques and game design approaches for development of games and simulations. Students explore concepts of procedural rhetoric, interactive storytelling, iterative design and teamwork as they develop a working prototype of a game or simulation.
Prerequisite: minimum grade of C- in DMA 213 or permission of instructor.
Offered: fall of even-numbered years.

DMA 355 Character Animation **3 Credits**
Character animation is one of the most important elements of game design. Students learn essential techniques and principles to create convincing, interactive character animations for games and simulations.
Prerequisite: DMA 213 or permission of instructor.

DMA 363 Print Design **3 Credits**
Focuses on critical topics in layout, folding, binding and printing, as well as critical/creative issues in magazine, publication and high-end corporate design.
Prerequisite: minimum grade of C- in DMA 212 or DMA 214.
Offered: spring of odd-numbered years.

DMA 370 Designing for Mobile Devices **3 Credits**
Proliferation of mobile devices in our society has had great effect on how information is distributed, how content is produced and how people interact with digital content. In this course students learn how to create and design content targeted for mobile screens, and how to take advantage of mobile specific functionality such as touch, multi- touch, GPS and accelerometer.
Prerequisite: minimum grade of C- in DMA 201 or permission of instructor.
Offered: spring of even-numbered years.

DMA 371 Game Design for Mobile Devices **3 Credits**
Mobile platforms have become very popular for distribution of games. In this course students learn how to design and develop 2D and 3D mobile games with user-centric approach. Students explore game design techniques that take advantage of mobile specific hardware functionality such as: accelerometer, multi-touch and GPS.
Prerequisite: minimum grade of C- in DMA 201 or permission of instructor.

DMA 380 Social Media Production **3 Credits**
Students will learn a variety of hands-on production skills that can be utilized for communicating on social media with photography, video, audio podcasting, motion graphics, and the design of email promotions, landing pages, coupons etc. Students will develop narrative strategies for both individual and organizational social media branding, as well as explore app-based tools that extend the use of digital media software.
Prerequisite: Either DMA 201 or JRN 200.
Offered: every fall.

DMA 384 Typography **3 Credits**
This course will focus on typography as an element of graphic design. Through assignments, class discussion, and reading, students can expect a greater understanding of how typography can enhance creativity and communication.

DMA 385 Digital Filmmaking **3 Credits**
This course introduces advanced SLR and digital cinema camera lens techniques for narrative filmmaking (shooting dramatic and comedic scenes). Production demos include lighting for filmmaking, boom mics, and camera support systems for dolly, crane and steady-cam shots. Final Cut and Adobe Premiere software is used to learn the techniques of narrative film editing.
Prerequisite: minimum grade of C- in DMA 201 or permission of instructor.

DMA 387 Commercial Filmmaking & Video **3 Credits**
Students create short-form TV and Web video commercials, learn camera and lens techniques for shooting action B-roll (sports, how-to, music video etc.) promotional videos, and branded films. This course also covers wireless audio and LED lighting equipment for run-and-gun interview shooting, a crucial skill for broadcast, advertising or documentary work.
Prerequisite: minimum grade of C- in DMA 201 or permission of instructor.

DMA 393 Advertising Design **3 Credits**
Offers experienced design students a series of challenging projects and exercises, characteristic of those found in the advertising industry. Projects will undergo proposal, development, and critique in a group setting. Projects will be done in collaboration with COM 320-Advertising Writing. This course fulfills Senior Project and Portfolio requirement for Graphic Design concentration.
Prerequisite: minimum grade of C- in DMA 201 or permission of instructor.
Offered: spring of even-numbered years.

DMA 395 Digital Illustration **3 Credits**
Don't violate copyrighted imagery off the web -- create your own! You don't have to know how to draw to create stunning graphics. Use Adobe CS to learn approaches, techniques and current trends of professional illustrators.
Prerequisite: minimum grade of C- in DMA 201 or permission of instructor.

DMA 399 Social Documentary **3 Credits**
This course fulfills the Senior Project and Portfolio requirement for the Digital Filmmaking concentration. Students examine a survey of important documentary photographers and filmmakers in order to understand the social function and ethical issues of documentary images. With the skills of the filmmaker, students realize how engagement with social issues is a key ingredient to their professional success in the industry.
Prerequisite: minimum grade of C- in DMA 201, JRN 201, or permission of instructor.
Fulfills College Core: Core Capstone
Offered: every spring.

DMA 442 Advanced Web Design **3 Credits**
This course is for students with a serious interest in web design. It aims to explore the current state of web design techniques and trends including responsive web design, custom WordPress themes, and e-commerce development. This course fulfills Senior Project and Portfolio requirement for Web Design concentration.
Prerequisite: minimum grade of C- in DMA 342, or CSC 108, or DMA 217, or permission of instructor.
Offered: spring of odd-numbered years.

DMA 450 Serious Games **3 Credits**
This course is an overview of a growing genre of Serious Games or games for purposes other than entertainment. Students learn about games for education, health, social change, marketing and training. The course concludes with a working prototype of a serious game, developed by small teams of students. This course fulfills Senior Project and Portfolio requirement for Game Design concentration.
Prerequisite: minimum grade of C- in DMA 351, or DMA 354, or DMA 371, or permission of instructor.
Offered: fall of odd-numbered years.

DMA 488 Internship I Seminar **3-9 Credits**
Student experientially learns communication functions in compatibly matched professional setting, locally or out-of- town. Faculty and on-site supervision. Seminar required. Pass/fail. May be repeated as DMA 498, 12-credit limit for DMA 488 and DMA 498 combined. Applications on Communication Studies Department website.
Prerequisite: junior or senior standing, minimum overall GPA of 2.50, minimum digital media arts average of 2.70, & approval by department faculty.
Offered: fall & spring.

DMA 491 Video Institute I **1-3 Credits**
Students produce significant projects in video, film, and television. See Dr. Irwin or Professor O'Neil for additional information.

DMA 492 Video Institute II **3 Credits**
Students produce significant projects in video, film, and television. See Dr. Irwin or Professor O'Neil for additional information.
Prerequisite: DMA 491

DMA 493 Video Institute III **3 Credits**
Students produce significant projects in video, film, and television. See Dr. Irwin or Professor O'Neil for additional information.
Fulfills College Core: Core Capstone

DMA 494 Video Institute IV **3 Credits**
Students produce significant projects in video, film, and television. See Dr. Irwin or Professor O'Neil for additional information.
Fulfills College Core: Core Capstone

DMA 499 Independent Study **3 Credits**
Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

English

In keeping with the college's Jesuit mission to educate the whole person, the English Department strives to nurture intellectual and spiritual growth through the study of literature and the practice of writing. The department fosters academic excellence through a diverse and rigorous curriculum that serves all students at Canisius. The English department is vitally committed to student learning in the Canisius Core Curriculum. Academic Writing (ENG 111) develops essential writing and critical skills, while Writing About Literature (ENG 112) studies literature as creative expression and builds critical and analytical skills through a writing process that includes a research assignment. In addition, the English department offers a range of literature and writing courses in the Core's Breadth of Knowledge field for Literature and the Arts (Field 3). These courses, taught at all levels, emphasize the aesthetic value of the works studied. Several English courses also fulfill Core cross-disciplinary knowledge requirements (in diversity, justice. or global awareness) and Core cross-disciplinary skills requirements (in oral communication or advanced writing intensive).

The English Department offers two majors: English and Creative Writing.

Majors

- English Major (p. 140)
- Creative Writing Major (p. 145)

Minors

The English Department offers four minors:

- English Minor (p. 141)
- The Writing Minor (p. 147)
- Creative Writing Minor (p. 147)
- Theatre Arts Minor (p. 147)

English (BA)

Chair: Mick Cochrane, PhD

Introduction

The English major is structured to help students build their reading, writing, and critical skills, as they gain broad exposure to British and American literature and develop a particular interest within the field of English studies. Two-hundred level courses, usually taken in the sophomore year, are organized around a particular literary genre or theme and emphasize literary analysis. ENG 299 introduces majors to critical methods and theoretical approaches to reading and writing, providing a gateway for studying literature at the upper-level. Courses numbered 300 and above are typically based in literature from a particular historical period and usually focus on a tradition, issue, or topic vital to English studies. These more advanced courses often require student presentations, critical approaches, and researched papers. Finally, an English capstone seminar helps students synthesize skills and knowledge from their coursework and reflect upon the meaning and value of their English major.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please see our English department website (https://www.canisius.edu/academics/programs/english/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in English.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Dual majors involving English are available in a large number of areas, including classics (p. 111), creative writing (p. 145), communication (p. 118), journalism (p. 186), history (p. 172), modern languages (p. 198), philosophy (p. 206), psychology (p. 225), sociology (p. 240), and biology (p. 93). Interested students should consult the chairs of both departments. With the permission of both chairs, inter-disciplinary courses may be used for credit toward the major requirements in both departments.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Internships

In addition to the classroom experience, internships in local businesses, arts, non-profit and social service oriented organizations prepare majors for careers in all areas where effective communication and understanding are essential, such as teaching, writing, law, social work, mass media and public relations.

Co-Curricular Activities

Additional department activities, designed to make literature a more integral part of the academic and creative life of English majors and other members of the college community, include The Quadrangle literary magazine, Sigma Tau Delta (International English Honors Society), and the Canisius College Contemporary Writers' Series. Also available for students are The Griffin college newspaper and the Little Theatre.

Additional Course Considerations

English Honors

English Honors is a flexible program designed to offer interested and motivated English majors the chance to earn honors designation by participating in innovative seminars and working with a faculty mentor in the writing of an original thesis.

English Honors seminars are unique courses, limited in enrollment, designed by faculty around especially engaging questions, topics, and texts. Some are interdisciplinary; some involve both critical and creative writing; others are organized around a particular period, theme, critical approach or major writer. Typically one English Honors seminar is offered each semester. The honors thesis is a long critical essay or creative project, written on a topic of the student's own choosing under the direction of a faculty mentor, the culmination of a semester's reading, researching and writing. You can read more about the program on the English Honors website (https://www.canisius.edu/academics/programs/english/english-honors-program/).

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they

provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
ENG 299	Introduction to English Studies	3
English 300 level Shakespeare: (one)		3
English 300 level British Literature before 1800: (one)		3
English 300 level American Literature before 1900: (one)		3
English 200 level or 300 level Writing/Rhetoric: (one)		3
ENG 450	English Capstone Seminar	3
200-level English electives: 2 courses		6
English Major electives: 4 courses (3/4 at 300-level)		12
Total Credits		36

Prerequisites for 200-level and above English courses: ENG 111 and ENG 112 (students who matriculated in fall 2017 or earlier use FYS 101 and ENG 101 as prerequisites), or permission of the department chair. Acting courses (I and II) carry no prerequisites and are open to freshmen.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Sophomore	
Fall	**Spring**
200-level English elective	ENG 299
200-level English elective	Writing/Rhetoric or Major elective
Junior	
Fall	**Spring**
Shakespeare	Pre-1800 British Literature
Pre-1900 American Literature	Writing/Rhetoric or Major elective
Senior	
Fall	**Spring**
Major Elective	English Major Senior Seminar
Major Elective	Major Elective

Learning Goals & Objectives

Student Learning Goal 1

Students will demonstrate an understanding of literary continuity through attention to different literary genres, literary traditions, historical periods, or national literatures.

Students will:

- **Objective A:** Students will evaluate literary works within specific genres, traditions, periods, or national literatures;
- **Objective B**: Students will evaluate literary works across specific genres, traditions, periods, or national literatures.

Student Learning Goal 2

Students will demonstrate an understanding of literary texts as works of art.

Students will:

- **Objective A:** Analyze literary works through carefully selected textual examples;
- **Objective B:** Analyze literary works in terms of literary language or structure;

Student Learning Goal 3

Students will demonstrate an understanding of the role of literary criticism in shaping the meaning and significance of literature.

Students will:

- **Objective A:** Incorporate critical sources appropriately into their writing;
- **Objective B:** Integrate critical sources effectively into their analysis of literature;
- **Objective C:** Situate their interpretation of literature in terms of critical issues or theories;
- **Objective D:** Students will use MLA bibliographic and citation style.

Student Learning Goal 4

Students will demonstrate writing skills commensurate with the development of a clear thesis, logical organization, appropriate use of evidence, and command of English grammar and usage.

Students will:

- **Objective A:** Students will demonstrate the ability to introduce a literary topic and assert a thesis;
- **Objective B:** Students will demonstrate the ability to use evidence to make a point about literature;
- **Objective C:** Students will demonstrate the ability to develop an argument about literature with coherent paragraphs;
- **Objective D:** Students will demonstrate the ability to develop an argument about literature with a logical overall structure;
- **Objective E:** Students will demonstrate the proper use of grammar and punctuation, as well as versatility with vocabulary and sentence structure.

Minor

For non-majors only. The Minor is a six-course sequence. It requires ENG 299 and 5 additional ENG courses, at least 3 at the 300-level.

Code	Title	Credits
ENG 299	Introduction to English Studies	3
3 ENG electives at the 300- or 400-level		9
2 ENG electives (at the 200-level or higher)		6
Total Credits		18

Courses

ENG 100 Introduction to College Writing **3 Credits**

Designed to help improve proficiency in English composition. Involves frequent writing, practicing strategies for gathering ideas, drafting, revising and editing, and reading/studying prose models.

ENG 101 Writing about Literature **3 Credits**
Introduces students to the study of literature as a creative expression of ideas. Students will sample literary work from the major genres (poetry, fiction, drama, literary nonfiction). They will develop a literary vocabulary; hone their critical and analytical skills; and practice the writing process, including completion of a research assignment.
Prerequisite: FYS 101

ENG 111 Academic Writing **3 Credits**
A course emphasizing the production of academic writing through critical analysis of challenging texts. Topics may be drawn from a wide range of academic disciplines. Stress on writing to enhance learning, finding and evaluating information, practicing academic integrity, negotiating the process of revision, and using correct grammar and syntax.
Offered: fall and spring.

ENG 112 Writing about Literature **3 Credits**
Strategies for reading and writing about literature (poetry, drama, fiction, literary essays). Emphasis on understanding and interpreting primary texts, rather than reading criticism. Intensive attention to writing, including the development and organization of interpretive essays, as well as the use and evaluation of sources.
Prerequisite: ENG 111.
Offered: every fall & spring.

ENG 147 Acting I **3 Credits**
Introduction to the art of acting. Through lecture and practice in acting assignments in class, students gain understanding of the actor's role in theater.
Restriction: none (open to any student, including freshmen).
Fulfills College Core: Oral Communication

ENG 148 Acting II **3 Credits**
Continuation of Acting I.
Restriction: none (open to any student, including freshmen).
Fulfills College Core: Oral Communication

ENG 201 Poetry **3 Credits**
Introductory survey of poetry for majors and non-majors.
Prerequisite: either FYS 101 & ENG 101 or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 202 Drama **3 Credits**
Introductory survey of drama for majors and non-majors.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 205 Varieties of the Essay **3 Credits**
Practice in writing several kinds of essays. Readings will provide models for writing on topics such as interpersonal relationships, cultural values, politics, nature and the environment. Special attention given to writing style.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive
Offered: occasionally.

ENG 208 Novel **3 Credits**
Introductory survey of the novel for majors and non-majors.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: occasionally.

ENG 211 Science Fiction and Fantasy **3 Credits**
Survey of science fiction for majors and non-majors.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 213 Word and Image **3 Credits**
Focuses on the formal and thematic elements of literary texts, films and texts composed of both words and images.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 216 Literature and Business **3 Credits**
Explores a range of literary representations of work, labor relations, business ethics, and developments in corporate culture. Emphasizes the different power relations between workers, managers, and consumers. Focuses on the analysis of literature—fiction and non-fiction—and film chosen from different historical periods and traditions. Open for majors and non-majors.
Prerequisite: ENG 111 & ENG 112, or permission of department chair.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 217 Law and Literature **3 Credits**
Explores a range of literary representations of legal institutions, the impact of significant legislation, and relationships between individuals and the law. Considers the multiple interpretations of law and legal authority. Focuses on the analysis of literature—fiction and non-fiction—and film chosen from different historical periods and traditions. Open for majors and non-majors.
Prerequisite: ENG 111 & ENG 112, or permission of department chair.
Fulfills College Core: Field 3 (Literature and the Arts), Justice
Offered: occasionally.

ENG 218 Literature and Medicine **3 Credits**
Surveys a range of Western cultural literary representations of health and disease, emphasizing the different power positions occupied by patient, caretaker, and doctor. Open to majors and non-majors.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 219 Literature and Psychology **3 Credits**
Focuses on the convergence of the disciplines of literature and psychology, especially the ways in which psychology has drawn on literary genres, techniques and motifs. Open to majors and non-majors.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 223 Images of Women in Literature and Film **3 Credits**
Representations of women as major characters in literature and film.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 224 The Journey in World Literature **3 Credits**
Explores the concept of the journey in international literature from a number of cultural and intellectual perspectives.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts), Global Awareness
Offered: once a year.

ENG 225 The Journey in American Literature **3 Credits**
Explores the concept of the journey in American Literature to examine the multi-cultural character of the United States.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Diversity, Field 3 (Literature and the Arts)
Offered: once a year.

ENG 233 The Quest in Medieval Literature **3 Credits**
The theme of the quest focuses this survey of medieval literature which includes texts from Anglo-Saxon poetry, the French Lais, and the Arthurian legends. The class also considers how these Medieval texts have been adapted in contemporary film and the stage.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 285 Animals in Film and Literature **3 Credits**
This advanced writing-intensive course enables students to explore and evaluate representations of animals, as well as how those representations signify human uses and understandings of animals, in a range of literary texts and films.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 294 Introduction to Creative Writing **3 Credits**
Workshop in the fundamentals of poetry and fiction writing, focusing on the close study and discussion of both student manuscripts and professional texts.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: every fall & spring.

ENG 299 Introduction to English Studies **3 Credits**
Introduction to the essentials of literary analysis and interpretation. Focusing on the rigorous analysis of poetry, prose narrative and drama chosen from different historical periods, the course will stress writing with critical awareness about literature.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: every fall.

ENG 301 British Literature I **3 Credits**
A survey of British literature from Medieval times through the Seventeenth Century.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: occasionally.

ENG 305 Age of Shakespeare **3 Credits**
A survey of poetry, prose, and drama in the vibrant English Renaissance.
Prerequisite: either FYS 101 and ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: occasionally.

ENG 306 Eighteenth Century Literature **3 Credits**
A survey of the poetry and prose of major British authors in the "long" eighteenth century.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: occasionally.

ENG 308 Nineteenth Century British Literature **3 Credits**
A survey of the major works and authors of the Romantic and Victorian periods.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: occasionally.

ENG 309 Transatlantic Modernism **3 Credits**
A survey of representative figures and genres in early twentieth-century British and American literature
Prerequisite: either FYS 101 & ENG 101 or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Diversity
Offered: occasionally.

ENG 315 American Literature I **3 Credits**
Studies the formation of a national literature from origins to 1900 through a diversity of American writers. (Diversity).
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Diversity
Offered: occasionally.

ENG 316 Revising the American Renaissance **3 Credits**
The course looks at a prolific period in American Literature from 1820-1865 examining romanticism, sentimentality, the slave narrative and periodical literature.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: occasionally.

ENG 319 Special Topics in American Literature **3 Credits**
The study of a particular theme, mode or period, such as "Captivity Narratives" and "The Rise of the American Novel." Topics vary semester to semester.
Prerequisites: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: every fall & spring.

ENG 322 Shakespeare I **3 Credits**
Introductory survey for majors. Plays drawn from the categories of comedy, tragedy and history.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: once a year.

ENG 323 Shakespeare II **3 Credits**
Works selected with emphasis on specific themes, structures, or styles. Shakespeare I is not a prerequisite.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: occasionally.

ENG 339 Southern Literature **3 Credits**
Studies twentieth-century literary fiction from the U.S. Southern region in terms of Southern history and culture, especially the legacy of the institution of slavery and the Civil War. Authors include William Faulkner, Flannery O'Connor, Toni Morrison, and others.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Diversity
Offered: occasionally.

ENG 342 Writing Young Adult Fiction **3 Credits**
Combines the study and the practice of the genre, reading and writing. Students study young adult novels in order to gain a sense of the variety of approaches and techniques available to a writer of YA fiction and, in a workshop setting, students propose, draft, revise, and edit YA stories of their own.
Prerequisite: either FYS 101 & ENG 101 or ENG 111 & ENG 112, and ENG 294, or permission of the department chair.
Offered: fall of even-numbered years.

ENG 347 English Novel I **3 Credits**
Studies a range of seventeenth- and eighteenth-century novels and their contexts, including both experimental works and traditional domestic tales.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: occasionally.

ENG 350 The Theater Experience **3 Credits**
Up close and personal experience in theater production through attendance at professional plays in the city, and hands-on experience in reading and producing short works in the classroom.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Oral Communication
Offered: every spring.

ENG 365 English Core Capstone **3 Credits**
Themed courses that integrate core curriculum attributes and skills. For majors and non-majors. Topics vary by semester and have recently included "Culture and Conflict: Re-Interpreting World War I," "Memoir: Individual and Culture," and "Post-Colonial Literatures".
Prerequisites: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Core Capstone
Offered: every spring.

ENG 368 Native American Literature **3 Credits**
A survey of contemporary Native American literature, covering major and lesser-known authors. The course traces the origins of traditions, both thematic and structural.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 369 Contemporary American Fiction **3 Credits**
Study of recently published novels and short stories, exploring the formal and thematic range of new fiction and focusing on the contemporary issues it reflects.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 370 English Gothic Novel **3 Credits**
This course will examine the English Gothic novel. Gothic novels emphasize the horrible, the supernatural, the sublime, and the fantastic, finding their inspiration in the mystery of the unknown. Knowledge and mystery, good and evil, the beautiful and the sublime, light and dark, all are opposing forces that characterize the human condition in the Gothic novel, which often dramatizes psychological, social, and sexual conflict. We will begin with Walpole and wend our way through the eighteenth- and nineteenth-century Gothic tradition and discuss how the Gothic transforms, adapting its political and social critique and incorporating developing understandings of human psychology.
Prerequisites: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of department chair.
Offered: occasionally.

ENG 373 Jane Austen **3 Credits**
Studies the novels along with literary criticism and other eighteenth century texts in order to understand Austen and her time.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: occasionally.

ENG 375 US Cold War Culture and Counterculture **3 Credits**
An exploration, through readings in literature, history, and film, of trauma and optimism following the end of World II in the United States, both the construction of a conformist culture and the emergence of counterculture meant to contest it.
Prerequisites: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of department chair.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 381 Postcolonial Literature **3 Credits**
Post World War II literature from areas of the globe that have recently emerged from European colonization; may include literature and film from Africa, the Middle East, South Asia, the Caribbean, or Ireland.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Global Awareness
Offered: occasionally.

ENG 382 African American Literature **3 Credits**
A survey of major writers and historical trends in African American literature from the time of slavery to the present.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: occasionally.

ENG 383 Advanced Academic Writing **3 Credits**
Intensive practice writing a sustained academic argument, including developing a topic, defining a purpose, conducting research, synthesizing sources and drafting an essay.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive
Offered: occasionally.

ENG 385 Rhetoric and Composition **3 Credits**
Introduction to the theoretical underpinnings and applications of rhetoric and composition.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive
Offered: occasionally.

ENG 388 Literary Publishing **3 Credits**
A practicum combining the study of the history of the literary magazine in America with the practical work of editing The Quadrangle, the Canisius College literary magazine.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: every spring.

ENG 389 Business Communication **3 Credits**
Practice in writing letters, memos and reports, with models and strategies offered for each form.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive
Offered: every fall, spring, & summer.

ENG 390 Tutoring Writing **3 Credits**
A theoretical and practical introduction to the methods and strategies of tutoring in a writing center.
Prerequisites: a minimum grade of C in either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of department chair.
Offered: every fall.

ENG 391 Advanced Creative Writing: Fiction **3 Credits**
Workshop for experienced writers in fiction.
Prerequisite: minimum grade of B in ENG 294 or permission of instructor.
Offered: spring of even-numbered years.

ENG 392 Advanced Creative Writing: Poetry **3 Credits**
Workshop for experienced writers in poetry.
Prerequisite: minimum grade of B in ENG 294 or permission of instructor.
Offered: spring of odd-numbered years.

ENG 393 Advanced Creative Writing: Memoir & Nonfiction **3 Credits**
Workshop for experienced writers in memoir.
Prerequisite: minimum grade of B in ENG 294 or permission of instructor.
Offered: fall of odd-numbered years.

ENG 396 English Honors Seminar **3 Credits**
English Honors seminars are designed by faculty around especially engaging questions, topics, and texts. Some are interdisciplinary; some involve both critical and creative writing; others are organized around a particular period, theme, critical approach, or major writer. Majors do not need to be in the English Honors Program to take this course.
Prerequisite: either FYS 101 or ENG 101, or ENG 111 & ENG 112, or permission of department chair.
Offered: every fall & spring.

ENG 450 English Capstone Seminar **3 Credits**
A culminating experience where students apply critical skills and knowledge gained from their English major coursework to an intensive study of a particular literary theme or subject. Topics vary by semester.
Prerequisite: either FYS 101 & ENG 101, or ENG 111 & ENG 112, or permission of the department chair.
Offered: every fall.

ENG 490 Creative Writing Senior Capstone **3 Credits**
Focus on preparation of a portfolio of polished work, creation of an artistic statement, submission of professional work, and career opportunities for writers.
Prerequisite: minimum grade of B in ENG 294 or permission of instructor.
Offered: every spring.

ENG 497 English Honors Thesis **3 Credits**
The honors thesis is a long paper, written on a topic of the student's choosing under the direction of a faculty mentor, the culmination of a semester's reading, researching, and writing.
Offered: every fall & spring.

ENG 498 Internship **3 Credits**
Internships are by application only and must be approved by the associate dean.

ENG 499 Independent Study **1-3 Credits**
Offers the opportunity to conduct a program of independent readings and/ or research on a topic of the student's choice under the supervision of a member of the English Department. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Creative Writing (BA)

Director: Eric L. Gansworth

Introduction

In keeping with the college's Jesuit mission to educate the whole person, the English Department strives to nurture intellectual and spiritual growth through the study of literature and the practice of writing. The department fosters academic excellence through a diverse and rigorous curriculum that serves all students at Canisius.

The department's creative writing major is structured to help students develop their writing skills, as they gain broad exposure to literature in a variety of periods, genres, and modes. In English 294 students explore the fundamental skills of fiction and poetry writing. They learn to read as writers, and become acquainted with the workshop method, which involves close reading and critiques of student manuscripts. In courses numbered 300

and above, they have the opportunity to gain more in-depth practice of a particular genre. Finally, in the senior creative writing capstone students will learn to do all the things working writers do: prepare, submit, and present work consistent with professional standards; understand and articulate how their work fits into larger literary traditions; and read in the manner of professional writers, attentive to textual choices and strategies and their effects on readers. Additional information is available at the Creative Writing website (https://www.canisius.edu/academics/programs/creative-writing/).

Major Experiences

The Canisius College Contemporary Writers Series brings nationally known writers to meet with Canisius students and to discuss their craft in an informal setting. The Quadrangle is the Canisius journal of literary and visual arts. Students may publish their own pieces or work as editors gaining real-world publishing skills. Internships with local literary publishers and arts organizations provide our students the opportunity to participate in the vibrant Buffalo literary scene and to acquire professional experience as writers, teachers, editors, and administrators.

Qualifications

Students must maintain a 3.0 GPA in their major and a 2.0 overall average to graduate with a degree in creative writing. Students must earn at least a grade of B in ENG 294 in order to enroll in advanced workshops.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
ENG 294	Introduction to Creative Writing	3
ENG 299	Introduction to English Studies	3
Contemporary literature: one course		3
British literature: one course		3
American literature: one course		3
ENG 490	Creative Writing Senior Capstone	3
Select three of the following:		9
ENG 342	Writing Young Adult Fiction	
ENG 388	Literary Publishing	
ENG 391	Advanced Creative Writing: Fiction	
ENG 392	Advanced Creative Writing: Poetry	
ENG 393	Advanced Creative Writing: Memoir & Nonfiction	
ENG 411	Playwriting	
ENG 498	Internship	
Additional electives: 3 literature courses approved by program director		9
Total Credits		36

Prerequisites for 200-level and above English courses: either FYS 101 & ENG 101, ENG 111 & ENG 112, or permission of the department chair. ENG 294 must be taken at Canisius by all students committing to the program. Transfer Creative Writing credit may be used as a Creative Writing Elective. ENG 294 (or permission of the instructor) is a prerequisite for ENG 391, ENG 392, ENG 393 and ENG 490. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Creative Writing website. (https://www.canisius.edu/academics/programs/creative-writing/)

Roadmap

Recommended Semester Schedule for Major Course Requirements

Sophomore

Fall	Spring
ENG 294	Creative Writing elective
ENG 299	American Literature requirement

Junior	
Fall	**Spring**
Creative Writing elective	Creative Writing elective
British Literature requirement	Contemporary Literature requirement
Senior	
Fall	**Spring**
Literature elective	ENG 490
Literature elective	Literature elective

Learning Goals & Objectives

Learning Goal 1

Students will demonstrate the ability to produce a polished, professional-quality portfolio of creative writing and an understanding of how to submit the work for publication.

Students will:

- **Objective A:** Draft, revise, and edit a technically accomplished creative manuscript (fiction, poetry, drama, or creative nonfiction).
- **Objective B**: Research literary journals and compile a list of magazines that fit their work.
- **Objective C:** Prepare a submission to a literary magazine: compose a cover letter and prepare a manuscript that conforms to professional conventions in the field.

Learning Goal 2

Students will develop an understanding of their own influences and aesthetic values as writers and how their own work fits into larger literary traditions.

Students will:

- **Objective A**: Describe the writers, texts, and movements that influence their work.
- **Objective B**: Articulate their aesthetic values.
- **Objective C**: Outline their own artistic projects: what they aim to accomplish in their work.

Learning Goal 3

Students will demonstrate the ability to perform their work effectively in public.

Students will:

- **Objective A:** Make an appropriate selection of their own work for public performance.
- **Objective B:** Introduce themselves and their work to an audience in an engaging way and place their selections in context.
- **Objective C**: Read or recite their work clearly and expressively.

Learning Goal 4

Students will demonstrate the ability to read as writers.

Students will:

- **Objective A**: Be able to identify and explain choices professional writers make in literary texts.
- **Objective B**: Be able to describe the effects of these choices.
- **Objective C**: Be able to discuss how they may interpolate similar choices in the creation of their own work.

Minor

In addition to the major, a creative writing minor is offered: a five-course sequence that includes many of the basic requirements for creative writing majors.

This minor is only available to students who are not majoring in Creative Writing.

It is a five course program that provides interested students the opportunity to learn and practice the fundamentals of writing stories, poems, essays and plays. For more information, please visit the Creative Writing website (https://www.canisius.edu/academics/programs/creative-writing/).

Code	Title	Credits
ENG 294	Introduction to Creative Writing	3
ENG 490	Creative Writing Senior Capstone	3
Select three of the following Creative Writing Courses:		9
ENG 342	Writing Young Adult Fiction	
ENG 388	Literary Publishing	
ENG 392	Advanced Creative Writing: Poetry	
ENG 498	Internship	
Total Credits		15

The Writing Minor

This minor is available to any student (both majors and non-majors).

Code	Title	Credits
Required Courses		
ENG 385	Persuasive Writing	3
ENG 498	Internship [1]	3
Elective Courses		
Select three of the following:		9
ENG 205	Varieties of the Essay	
ENG 294	Introduction to Creative Writing [2]	
ENG 383	Reseach Writing: Process and Product	
ENG 388	Literary Publishing	
ENG 389	Business Communication	
ENG 411	Playwriting [2]	
Total Credits		15

1 One of the student's choice, with advice of a faculty supervisor.

2 No more than one of the following courses may be taken for the minor: ENG 294 & ENG 411.

Theatre Arts Minor

This minor is open to any student (majors and non-majors). It is a five-course sequence that includes course work in acting and production as well as in dramatic literature and playwriting.

Code	Title	Credits
ENG 147	Acting I	3
or ENG 148	Acting II	
ENG 202	Drama	3
ENG 350	The Theater Experience	3
Select two of the following:		6

ENG 411	Playwriting	
Theatre arts elective		
Theatre arts elective		
ENG 498	Internship	
Total Credits		15

Environmental Science (BS)

Director: Katie Costanzo, PhD

Introduction

The Environmental Science major provides both theoretical and applied knowledge for students interested in professional careers in the environmental sciences, e.g., environmental consulting, environmental regulation and monitoring, environmental conservation, environmental health sciences (toxicology, occupational health, health physics, industrial hygiene, water quality industry) and the ecological sciences. In addition, the curriculum facilitates entry into graduate programs in the ecological, environmental health and environmental sciences.

The Environmental Science program has an interdisciplinary focus with required and recommended courses in the areas of biology, chemistry, geology, philosophy and social sciences. In addition, it is designed to provide job experiences through the completion of two required internships. For students interested in graduate study in the environmental sciences, one internship may be replaced with independent research in the environmental sciences.

For a more detailed description of the faculty, facilities, academic and co-curricular opportunities please visit the Environmental Science website (https://www.canisius.edu/academics/programs/environmental-science/).

Qualifications

Students must maintain a 2.0 GPA in their major and support courses and a 2.0 overall average to graduate with a degree in Environmental Science.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

The advisor may be changed at the student's request.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Your advisor will be able to assist with course planning to facilitate a second major, so please let your advisor know if you are considering a dual major

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Major Experiences

All environmental science majors must complete two internship experiences. Recent internships have included Ecology and Environment, New York State Department of Environmental Conservation, U.S. Fish and Wildlife Service, TestAmerica Laboratories, Student Conservation Association of AmeriCorps, Erie County Department of Environmental Planning, Tifft Nature Preserve, and the Buffalo Museum of Science. We encourage students to work with any faculty member in the program to find internships that will best meet their goals and needs.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 320 & 320L	Field Ecology and Field Ecology Lab	4
BIO 360	Environmental Health	3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory [1]	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4

CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 232 & 232L	Environmental Analytical Chemistry and Environmental Analytical Chemistry Laboratory	4
GEOL 120 & 120L	Introductory Geology and Introductory Geology Laboratory	4
ENV 200 & 200L	Introductory Hydrology and Introductory Hydrology Laboratory	4
ENV 352	Environmental Science Seminar I	1
ENV 354	Environmental Science Seminar II	1
ENV 498 & ENV 499	Environmental Science Internship I and Environmental Science Internship II [2]	6
Choose two of the following math courses		6-8
PSY 201	Basic Statistics for Behavioral Sciences	
or MAT 141	Inferential Statistics and Computers for Science	
PSY 401	Advanced Statistics Seminar	
MAT 111	Calculus I [1]	
MAT 112	Calculus II	
3 additional Environmental Science Electives with lab (see list below)		12
One additional Environmental Science elective (may be taken with or without the lab)		3
Social Science or Humanities Requirement (select one of the following courses)		3
EVST 235	Environmental Policy	
SOC 234	Environment and Society	
PHI 244	Environmental Ethics	
Total Credits		71-73

1 Students may use MAT 109 and MAT 110 to replace MAT 111.

2 Students may choose BIO 401 or ENV 401 in lieu of their second internship. This option is recommended for students considering graduate school or a career in research.

Environmental Science Electives

Students must complete four of the following (at least three with labs):

Code	Title	Credits
ABEC 345 & 345L	Herpetology and Herpetology Lab (lab optional)	4
ABEC 341 & 341L	Urban Ecology and Urban Ecology Lab (lab optional)	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I (lab required)	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II (lab required)	4
BIO 305 & 305L	Medical Microbiology and its Ecological Basis and Medical Microbiology and its Ecological Basis Lab (lab optional)	4
BIO 307 & 307L	Microbiology and Microbiology Laboratory (lab optional)	4
BIO 322	Conservation Biology	3
BIO 335 & 335L	Plant Biology and Plant Biology Lab (lab optional)	4
BIO 343 & 343L	Entomology and Entomology Lab (lab required)	4
BIO 364	Zoology: Diversity of Animal Life	3
BIO 366 & 366L	Ornithology and Ornithology Laboratory (lab required)	4
BIO 370 & 370L	Plant Morphology and Plant Morphology Lab (lab required)	4
BIO 375 & 375L	Community Ecology and Community Ecology Laboratory (lab optional)	4
BIO 377 & 377L	Freshwater Biology and Freshwater Biology Laboratory (lab required)	4
BIO 378 & 378L	Wetlands and Wetlands Laboratory (lab optional)	4
CHM 301 & 301L	Fundamental Physical Chemistry and Fundamental Physical Chemistry Laboratory (lab optional)	4
PHY 201 & 201L	College Physics I and College Physics I Laboratory (lab required)	4
SOC 315	Geographical Information Systems (GIS) for the Social Sciences	3

NOTE: Most classes are offered every other year. Please check the advisement guide each semester to see which classes are being offered. The advisement guide will be used to indicate which courses students in each class year should be taking and when internship applications need to be submitted.

We encourage Environmental Science majors to take humanities classes that combine social and environmental issues like Environmental Ethics (PHI 244), Environment and Society (SOC 234), and Ecotheology (RST 347).

Learning Goals & Objectives

Learning Goal 1

Students will develop competency with respect to knowledge having a firm grasp of the basic concepts in environmental science.

Students will:

- Objective A: Demonstrate an understanding of general environmental concepts from ecology, geology, hydrology, and analytical chemistry;
- Objective B: Demonstrate detailed knowledge within at least two areas of environmental science;
- Objective C: Connect previously learned material with real-life environmental situations.

Learning Goal 2

Students will develop problem-solving skills being able to perform the following.

Students will:

- Objective A: Read and interpret data;
- Objective B: Design an experiment to address a specific hypothesis;
- Objective C: Critically analyze an article from the original scientific literature or a professional report.

Learning Goal 3

Students will demonstrate mastery with respect to technical skills.

Students will:

- Objective A: Effectively communicate scientific material in written form;
- Objective B: Draw a graph;
- Objective C: Design a table.

Courses

Environmental Science Courses

ENV 200 Introductory Hydrology **4 Credits**
Introduction to hydrologic processes, methods for quantifying hydrologic parameters and processes, and practical exposure to conducting and reporting hydrological studies. Lab required.
Prerequisite: GEOL 120 & GEOL 120L.
Offered: Spring 2020.

ENV 352 Environmental Science Seminar I **1 Credit**
Designed to provide environmental science students the opportunity to learn various methods of preparing scientific/experimental information for written format and oral presentation. Career preparations are also included.
Offered: every spring.

ENV 354 Environmental Science Seminar II **1 Credit**
This course will provide Information about a variety of careers in the field of environmental science. Students will also give presentations on their internship experiences. Required in junior or senior year.
Prerequisite: ENV 352.
Offered: spring of odd-numbered years.

ENV 401 Independent Research **1-3 Credits**
Independent laboratory research in environmental science conducted under the supervision of a faculty member. Arrangements must be made prior to registration.
Prerequisite: written permission of faculty member & program director.
Offered: fall & spring.

ENV 498 Environmental Science Internship I **1-3 Credits**
Practical experiences in the environmental sciences. Students must complete two internships in different areas of environmental sciences. Internships require an application and approval by the associate dean.
Prerequisite: junior or senior standing, minimum GPA of 2.0 in the major, a positive recommendation from a faculty member, & a completed & approved internship application.
Offered: fall & spring.

ENV 499 Environmental Science Internship II **1-3 Credits**
Practical experiences in the environmental sciences. Students must complete two internships in different areas of environmental sciences. Internships require an application and approval by the associate dean.
Prerequisite: junior or senior standing, minimum GPA of 2.0 in the major, a positive recommendation from a faculty member, & a completed & approved internship application.
Offered: fall & spring.

Geology Course

GEOL 120 Introductory Geology **3 Credits**
Basic concepts, including uniformitarianism, the rock cycle, the hydrologic cycle, tectonics and surface processes. Also covers how humans affect and are affected by their environment. Lab required. Students may not receive credit for both GEOL 120 and PHY 130.
Corequisite: GEOL 120L.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: Fall 2019.

GEOL 120L Introductory Geology Laboratory **1 Credit**
Required lab for GEOL 120.
Corequisite: GEOL 120.
Offered: Fall 2019.

Environmental Studies (BA)

Director: Erin Robinson, PhD

Introduction

Environmental problems are more visible in our society than ever before. In order to address these issues, there is an ever present need to develop an understanding of the social and natural systems that foster the creation and resolution of environmental issues. Cultural, economic, and social systems provide the structure within which environmental problems are created and solved.

The Environmental Studies BA focuses on interdisciplinary connections between environmental and social systems. The program engages students to think critically about environmental issues and offers active learning experiences for students to apply their knowledge. Combining environmental science with social sciences, business and economics, and the humanities ensures an integrated perspective on environmental issues which lays a foundation for a wide range of careers. The interdisciplinary nature of the program allows students to combine ways of knowing which fully address the multiple facets and complex systems of environmental issues. Students take a series of required courses for the major and then select a specialization option to further focus their knowledge.

Major Tracks

Environmental Studies majors can select a specialization track made up of five courses. Specialization Tracks include Environmental Justice, Environmental Conservation and Administration, Sustainable Economics, Environmental Literacy and Public Health. Students can specialize in one area, or select a combination of electives from different tracks that best meet their interests. Each student will select four electives and an internship.

All Environmental Studies majors will complete an internship (EVST 498). Internship opportunities will range from local and regional opportunities to international opportunities through partnerships with well-established environmental organizations.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Environmental Studies website (https://www.canisius.edu/academics/programs/environmental-studies/).

Qualifications

Students must maintain a 2.0 GPA in their major, earn a C or higher in all required courses in the major, and earn a 2.0 overall average to graduate with a degree in Environmental Studies.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students should consult with Dr. Erin Robinson, Director of Environmental Studies, for current advisement information. Students are advised to be familiar with their Griff Audit.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
ECO 101	Principles of Macroeconomics	3
EVST 110	Science of Environmental Problems I	3
EVST 111	Science of Environmental Problems II	3
SOC 234	Environment and Society	3
PHI 244	Environmental Ethics	3
or RST 347	Ecotheology	
Select 1 of the following Research Methods courses:		3
ANT 351	Qualitative Research Methods	
HSV 303	Research Methods in the Social Sciences	
SOC 342	Quantitative Research Methods	
Select 1 of the following Geographical Information Systems (GIS) courses:		3
ECO 310	Introduction to Geographic Information Systems	
ECO 311	Metropolitan Economic Development and GIS	
SOC 315	Geographical Information Systems (GIS) for the Social Sciences	
Select 4 Major Electives		12
SOC 324	Visual Sociology	3
EVST 498	Internship	1-3
Total Credits		37-39

Major Electives

A student's electives must be 4 courses from any of the designated major tracks.

Environmental Justice Track

Focuses student attention on social and environmental justice through the use of critical thinking of structural problems and how these issues are applied to environmental problems and human society.

Code	Title	Credits
EVST 250	Nature, Culture and Interpretation	3
EVST 275	Global Environmental Problems	3
SOC 273	Social Movements and Social Change	3
SOC 340	Sociology of the City	3
PHI 245	Animal Ethics	3
PSY 329	Leadership and Motivation	3

Environmental Conservation and Administration

Focuses student attention on the movements for conservation practices and the legal, historical, and organization implications for the welfare of the environment.

Code	Title	Credits
EVST 259	Environmental History of the United States	3
EVST 275	Global Environmental Problems	3
COM 302	Small Group Communication	3
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
PSC 242	International Organizations	3

Sustainable Economics

Focuses student attention on the development of sustainable business practices from a systems approach. Enables students to develop an understanding of the nature of green economic practices.

Code	Title	Credits
EVST 275	Global Environmental Problems	3
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
ENT 314	Social Entrepreneurship and Sustainability	3
MGT 440	Global Supply Chain Management	3

Environmental Literacy and Public Health

Focuses student attention on the role of information literacy in environmental issues. Allows for critical perspective and analysis of the role of science, risk, and communication in society today.

Code	Title	Credits
EVST 275	Global Environmental Problems	3
COM 348	Environmental Communication	3
BIO 116	Disease: Myth and Reality	3

Roadmap

Recommended Sequence for Major Courses

Freshman	
Fall	**Spring**
EVST 110	EVST 111
ECO 101	
Sophomore	
Fall	**Spring**
Select one of the following:	SOC 234
HSV 303	Track Option Elective
SOC 342	
ANT 351	
PHI 244 or RST 347	
Junior	
Fall	**Spring**
Select one of the following:	Track Option Elective
ECO 310	
ECO 311	
SOC 315	
Track Option Elective	
Senior	
Fall	**Spring**
EVST 498	Track Option Elective
	SOC 324

Learning Goals & Objectives

Student Learning Goal 1

Environmental Studies Majors will Demonstrate knowledge of complex environmental systems and environmental issues in scientific, cultural, and social realms

Students will:

- Objective A: Evaluate information on political economy of environmental issues;
- Objective B: Articulate issues of social construction of science;
- Objective C: Articulate an integration of issues of environmental and social justice.

Student Learning Goal 2

Environmental Studies Majors will Demonstrate scientific literacy of environmental issues

Students will:

- Objective A: Demonstrate knowledge of complex theories of environmental problems;
- Objective B: Develop relevant research questions for environmental investigation;
- Objective C: Use methods and tools of environmental research, including statistical analysis, GIS, and other techniques, to address relevant research questions.

Student Learning Goal 3

Environmental Studies Students will Demonstrate readiness to enter post graduate career and educational opportunities

Students will:

- Objective A: Demonstrate skills needed to compete in green careers, for example grant writing and oral communication;
- Objective B: Complete an internship with an established environmental organization;
- Objective C: Collaborate with local, regional, national, and/or international professionals in environmental career and post graduate educational settings;

Courses

EVST 110 Science of Environmental Problems I **3 Credits**

Environmental problems are defined as problems that result from interactions between humans and the natural environment. This course is designed to provide a conceptual framework for understanding and analyzing environmental problems, an introduction to the scientific basis of key environmental problems, and an introduction to scientific solutions to environmental problems.

Fulfills College Core: Field 6 (Natural Sciences)

EVST 111 Science of Environmental Problems II **3 Credits**

This course is designed to provide a conceptual framework for understanding and analyzing environmental problems, to the scientific basis of key environmental problems abnd their solutions. An extension from EVST 110.

Fulfills College Core: Field 6 (Natural Sciences)

EVST 235 Environmental Policy **3 Credits**

This course key issues within environmental policy. As well as exploring the history and origins of policy, we will explore some of the key debates such as eco-centrism versus anthropocentrism, animal rights, global justice and our obligations to future generations. Key concepts will include local, state, national, and internation policy perspectives; views of democrac and social justice. Reference will be made to other strands of environmental policy and contemporary political theory such as liberalism, socialism, feminism, nationalism and anarchism.

Offered: Fall

EVST 250 Nature, Culture and Interpretation **3 Credits**
Narratives--stories--are one of the primary tools humans use to shape their understanding of themselves and their environment. Course examines non-fiction, creative non-fiction and fictional narratives to identify origins and elaborations of stories we tell about nature and culture as they impact our relationships to our environments.
Prerequisites: FYS 101 and ENG 101
Fulfills College Core: Field 5 (Social Sciences)

EVST 259 Environmental History of the United States **3 Credits**
This course examines the evolving relationship between humans and the nonhuman natural world in the United States. Topics include the ecological implications of the arrival of African and European peoples in North America, westward expansion, impacts of industrialization, the industrialization of agriculture, and the development of ecological consciousness.
Fulfills College Core: Field 4 (History)

EVST 275 Global Environmental Problems **3 Credits**
This course examines global environmental policy in relation to structural and historical realities of environmental change. Topics to be discussed include pre and post industrialization and environmental policy, globalization, environmental activism, climate change, and perspectives of international historical roots of policy and change.
Fulfills College Core: Field 5 (Social Sciences)

EVST 498 Internship **1-3 Credits**
Students will have the opportunity to participate in the daily work of an environmental agency or organization. Students assume responsibility for daily work and, upon agreement with the instructor and site supervisor, a reflection journal, a research paper and 120 hours of work on-site.
Prerequisite: permission of chair & associate dean.

EVST 499 Independent Study **1-4 Credits**
Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Ethics & Justice Program

Co-Director: Tanya Loughead, PhD, Associate Professor, Philosophy
Co-Director: Philip Reed, PhD, Associate Professor, Philosophy

The contemporary world is fraught with serious challenges to well-being, a world in which poor and marginalized peoples are especially at risk because of their vulnerability to the effects of globalization and climate change, human trafficking, disease and war. We are surrounded by moral disagreements that appear to be incommensurable and irresolvable. Moreover, moral discourse seems to be rooted in pernicious relativism that prevents genuine, sustained, rational and reflective inquiry. To address the pressing concerns of our contemporary world, the community of Jesuit colleges and universities has espoused a special commitment to promote the causes of social justice. In this connection, they are redoubling their efforts to develop academic programs and social activities that cultivate the values of responsible citizenship among their students.

The Department of Philosophy at Canisius College has taken up this cause by developing a curriculum that addresses concerns of social justice. The Department has also developed two interdisciplinary minor programs — one in Ethics, the other in Justice.

These minors help students to participate in careful analysis and to cultivate moral imagination and thereby to enrich their capacities for moral discernment. We want students to advance beyond merely espousing opinions to become enabled to examine their pre-reflective commitments in the context of commitments to truth and the promotion of justice. The overarching objective is to provide students with occasions to enrich their skills to think clearly and thoroughly about matters of ethics and justice.

These minors compliment any major or focus, since the questions we ask are universal questions central to creating a more ethical and just world. Students sometimes find themselves especially drawn to issues of ethics and justice. These minor programs will enable students to engage in sustained examination to better prepare them to be more effective leaders in our community. The minors are flexible in their requirements, allowing room for students to focus on their particular interests, such as moral or justice concerns relating to the environment, gender issues, or health care, among many others. The Ethics Minor and Justice Minor will serve also to provide credentials for students seeking employment or applying to graduate school.

Advisement

All students should meet with one of the Ethics & Justice program directors (Loughead or Reed) in choosing their electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences, along with designing the themes and timeline of their theses.

Canisius College offers two minors from this program: a minor in Ethics and a minor in Justice.

- Ethics Minor (p. 153)
- Justice Minor (p. 154)

Ethics Minor

This minor is available to students in any major.

Ethics Minor Requirements

Students are required to complete a total of 16 credit hours, including 20 hours of service learning.

Code	Title	Credits
PHI 241	Ethics: Traditions in Moral Reasoning	3
Ethics Electives (choose any four of the following):		12
CLS 207	Mythology and Literature	
PHI 242	Ethical Issues in Business	
PHI 243	Bio-Medical Ethics	
PHI 244	Environmental Ethics	
PHI 245	Animal Ethics	
PHI 246	Ethics of Technology	
PHI 252	Happiness, Virtue and the Good Life	
RST 340	Moral Issues Today	
RST 342	Theological Ethics and Environmental Justice	
RST 345	Bio-Moral Problems	
PHI 398	The City and the Good Life	
PHI 258	Minor Service (Ethics)	0
Independent Research Project		1
Total Credits		16

Learning Goals & Objectives

Student Learning Goal 1

Students will demonstrate analysis of and reflection upon concerns of ethics.

Students will:

- **Objective A:** Show competence and expertise in some concerns of ethics.
- **Objective B:** Demonstrate knowledge of the relevant theories of ethics and the ability to critically analyze and reflect on these theories.
- **Objective C:** Understand and reflect on the experience of some concerns of ethics.

Student Learning Goal 2

Students will be able to thoughtfully apply moral principles to cultivate their characters and to work towards realizing a more just world.

Students will:

- **Objective A:** Recognize and analyze some contemporary concerns where ethics is at stake (such as environmental racism, or the abortion debate) and propose thoughtful solutions or approaches to these issues.
- **Objective B:** Engage on a personal level some contemporary concerns where ethics is at stake.

Justice Minor

The Justice Minor Requirements

Students are required to complete a total of 16 credit hours, including 20 hours of service learning.

Code	Title	Credits
PHI 240	Justice	3
Justice Electives (choose any four of the following):		12
CLS 300	Roman Law and Society	
ENG 319	Special Topics in American Literature	
HIS 230	The Holocaust in Historical Perspective	
HIS 347	The History of Marxism	
MGT 430	Sustainability and Supply Chains	
PHI 261	Philosophy of Law	
PHI 267	Faith, Reason, and Justice Catholic Social Thought	
PHI 271	Philosophy of Human Rights	
PHI 272	Gender and Philosophy	
PHI 274	Social and Political Philosophy	
PSC 241	Human Rights and Globalization	
PSC 244	War: Causes and Consequences	
RST 234	Christians (En) Countering Injustice	
RST 341	Catholic Social Ethics: Theological Perspectives	
SOC 273	Social Movements and Social Change	
IGSR 300	Immersion East Side Seminar	
PHI 258	Minor Service (Justice)	0
Independent Research Project (on a Justice theme)		1
Total Credits		16

LEARNING GOALS AND OBJECTIVES

Student Learning Goal 1

Students will demonstrate analysis of and reflection upon concerns of justice.

Students will:

- **Objective A:** Show competence and expertise in some concerns of justice.
- **Objective B:** Demonstrate knowledge of the relevant theories of justice and the ability to critically analyze and reflect on these theories.
- **Objective C:** Understand and reflect on the experience of some concerns of justice.

Student Learning Goal 2

Students will be able to thoughtfully apply moral principles to cultivate their characters and to work towards realizing a more just world.

Students will:

- **Objective A:** Recognize and analyze some contemporary concerns where justice is at stake (such as environmental racism, or the abortion debate) and propose thoughtful solutions or approaches to these issues.
- **Objective B:** Engage on a personal level some contemporary concerns where justice is at stake.

European Studies (BA)

Director: John D Occhipinti, PhD

Introduction

Today's world has been shaped by Europe. In fact, the study of Europe is growing even more important as globalization intensifies and the world becomes increasingly interdependent. Meanwhile, the expanding European Union has emerged as an influential player in international politics and business. What happens in Europe matters for the United States.

European Studies is an interdisciplinary program designed to familiarize students with the politics, history, language and culture of this diverse continent. European Studies must be pursued as part of a double or triple major or as a minor. The major and minors are intended to supplement students' majors in more traditional academic disciplines, as well as to provide a "home" for courses taken while studying abroad in Europe. European Studies helps students build their resumes and "European credentials" when added to majors in international relations, political science, history, foreign language, fine arts, English or international business. The European Studies Program also encourages students to develop fluency in a modern European foreign language and to study abroad in Europe. By guiding students in their course selection and encouraging them to develop valuable skills and experiences, European Studies helps prepare students for graduate school, apply for fellowships, such as the Fulbright Scholarship, and enter careers in international law, business, diplomacy or teaching. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the European Studies Program website (https://www.canisius.edu/academics/programs/european-studies/).

Qualifications

Students must have another major in a traditional academic discipline. No more than four courses at the 100-level may be counted toward the European Studies major. At least one course in the major must be taught by a member of the History Department, and one must be taught by a member of the Political Science Department.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

In European Studies, all students are advised by the Program Director in addition to the advisor in their other major. It is important to work with both to plan an academic pathway that includes the required co-curricular and study abroad experiences.

Dual Majors

European Studies majors must have a second major in a traditional academic discipline. An unlimited number of courses may be applied to the major from study abroad programs in Europe, the core curriculum, the All-College Honors Program or from a second, third, or fourth major. Most dual major combinations can be completed within the minimum 120 credit hour degree requirement. However, in some cases, additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and program director and the appropriate associate dean.

Jean Monnet Award

Each year, the program honors its best graduating senior, taking into account academic performance, study abroad and co-curricular activity related to Europe.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Select one of the following:		3
PSC 150	Comparative Government and Politics	
Field 4 course on European History (1 course)		
History and Politics Major Electives (3 courses)		9
European Foreign Language, Literature and Culture Major Electives (4 courses)		12
European Studies Major Electives (2 approved courses from any field)		6
Total Credits		30

Major Experiences

Majors in European Studies must complete a substantial short- or long-term experience in Europe to be approved by the Program Director. For this, students must complete and submit a reflective journal. An example of an acceptable short-term experience would be EuroSim. Long-term experiences would include one of the college's study abroad semesters in Europe or an alternative approved by the Program Director. Many courses taken abroad can be applied to the requirements of the major or minor.

Major or minors must also demonstrate proficiency in German, French or Spanish through the 216/217 level, the approved equivalent, or at a lower level of proficiency for other European languages when combined with approved study abroad in a country where that language is spoken.

Courses in a modern European language or those on European literature may be counted toward the language, literature and culture or major elective categories noted above. Latin and Ancient Greek may not be used to fulfill the modern foreign language requirement, but courses in the Classics can be counted in the major. For further details and options, students should consult with their advisor and the Director of the European Studies Program.

Additional Course Considerations

The variety and sequence of courses for the European Studies major will vary according to the second or third academic major. Students are encouraged to fulfill their fields of study, attributes for the core curriculum and requirements of the All College Honors Program by taking courses on Europe in the social sciences, fine arts and literature, history, religion, philosophy and foreign language.

It is especially important for students to take a course in a European foreign language in their first semester at Canisius College and continue with this language at least through the 216/217 level. Students should also fulfill Field 4 or Honors requirements by taking courses on European history. Students with a strong interest in European politics should take PSC 150 during their first year and PSC 355 (European Union) after that.

Students may participate in an annual international, intercollegiate simulation of the European Union, known as EuroSim, which is related to PSC 355. This program is held in Europe and the United States in alternating years. Additional information is available on the European Studies Program website (http://www.canisius.edu/euro-studies/).

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman

Fall	Spring
Select one of the following:	Select one of the following:
FRC 215	FRC 217
GER 215	GER 216
SPA 215	SPA 217
PSC 150	

Sophomore

Fall	Spring
Foreign Language, Literature and Culture Major Elective	Foreign Language, Literature and Culture Major Elective
History and Politics Major Elective	History and Politics Major Elective

Junior

Fall	Spring
European Studies Major Elective	History and Politics Major Elective

Senior

Fall

European Studies Major Elective

Learning Goals & Objectives

Student Learning Goal 1

Majors will apply knowledge of European government and politics to real world situations.

Students will:

- Objective A: Demonstrate knowledge of important political figures and events in contemporary European politics;
- Objective B: Demonstrate an understanding of key issues in contemporary European politics;
- Objective C: Demonstrate an understanding of how key governmental institutions in Europe function.

Student Learning Goal 2

Majors will communicate at the intermediate level in a Modern European foreign language (comparable to Canisius College course level 216).

Students will:

- Objective A: Speak with fluency and grammatical correctness in the target language;
- Objective B: Understand verbal communication in the target language;
- Objective C: Read a in the target language;
- Objective D: Write in the target language.

Student Learning Goal 3

Majors will apply knowledge of European History to real world situations.

Students will:

- Objective A: Understand how contemporary European society has been shaped and influenced by Europe's history;
- Objective B: Understand the significance of key European historical figures and events when referred to in contemporary social discourse.

Student Learning Goal 4

Majors will apply knowledge of European language, literature, and culture to real world situations.

Students will:

- Objective A: Recognize the key beliefs, values, norms and cultural artifacts that comprise societal culture in Europe, including its various sub-cultures;
- Objective B: Appreciate the contributions made to Europe's culture by some of its key cultural figures from literature and the fine arts;
- Objective C: Understand the significance of key contributions to European literature and fine arts when references to these contributions are made in contemporary social discourse or everyday life.

Minor

Code	Title	Credits
Select one of the following:		3
PSC 150	Comparative Government and Politics	
Field 4 course on European history (1 course)		
History and Politics Major Electives (2 courses)		6
European Foreign Language, Literature and Culture Major Electives (3 courses)		9
Total Credits		18

Students must complete the appropriate minor request form.

The requirements for proficiency in a modern European foreign language are the same as for the major. No more than three courses at the 100-level may be counted toward the minor. A maximum of two courses in a modern European foreign language may be counted toward the language, literature or culture category of the minor. Pending approval of the Program Director, courses to be applied to the minor can be taken abroad or as part of other majors, the core curriculum or the All-College Honors Program.

Fine Arts

Chair: Richard Falkenstein, PhD

The Fine Arts Department provides opportunities for students to obtain a sound knowledge of the visual and performing arts. The department's offerings include a creative and performing arts interdisciplinary studies major and minors in music, art history, and studio art. These programs enable students to receive training for professional careers in the areas involved or to explore the arts for their own personal development.

Majors

- Creative and Performing Arts Interdisciplinary Studies (p. 161)

Minors

- Art History Minor (p. 161)
- Music Minor (p. 169)
- Studio Art Minor (p. 171)

Courses

Fine Arts - Creative and Performing Arts (ARTS)

Course Descriptions (Per Subject)

ARTS 202 Social Media and the Arts **3 Credits**
Students develop skills necessary to visual and performing artists and arts administrators in promoting their work or that of their cultural institution. The course teaches students how to reach and communicate with their target audiences effectively. Topics covered include website strategies, blogging, social media site management, mobile tactics, and others.
Prerequisite: None. **Corequisite:** None.
Offered: occasionally.

ARTS 301 Arts Adminstration **3 Credits**
The course is a comprehensive discussion of artist management and arts administration, promotion, marketing, contract law and negotiation, media and public relations as well as agent and manager responsibilities in the recording industry.
Prerequisite: None. **Corequisite:** None.
Offered: occasionally.

ARTS 302 Not-for-Profit Arts Organizations **3 Credits**
The course is an overview arts management, administration, promotion, and legal issues as they apply to not-for-profit arts organizations. Topics covered include basic finance for not-for profit organizations, logistics of day-to-day operations, writing grant proposals, strategies for driving revenue, and others.
Prerequisite: None. **Corequisite:** None.
Offered: occasionally.

ARTS 401 Fine Arts Project **3 Credits**
Students will be guided through a fine arts project that will demonstrate advanced accomplishment related to their concentration in the Creative and Performing Arts Interdisciplinary Studies degree. Projects could be an extended paper, a musical performance, an audio technology project, a gallery show, or any other appropriate medium. Students will be mentored by appropriate faculty and will provide regular reports and demonstrations of progress throughout the semester.
Corequisite: None.
Offered: occasionally.

Fine Arts - Art History (FAH)

FAH 101 Cave Paintings, the Colosseum & Cathedrals **3 Credits**
Introduction to visual and cultural analysis of major works of art from prehistory through the Middle Ages. Covers prehistoric through Gothic art.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall, spring, & summer.

FAH 102 Altarpieces, Academies & the Avant-Garde **3 Credits**
Introduction to visual and cultural analysis of major works of Western art from the Renaissance through the contemporary moment.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall, spring, & summer.

FAH 103 Survey of Pre-Columbian and Native American Art **3 Credits**
The artistic achievements of native peoples from the Americas. Toltec, Maya, and Aztec civilizations of Central America, and culture groups from the Woodlands, Plains, Southwest, and Northwest in North America prior to and after contact with Europe.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: fall.

FAH 107 Introduction to African and Asian Art **3 Credits**
Beginning with a discussion about the Silk Road, art of the Asian and African continents and the Pacific Ocean cultures are central topics. This course is an introduction to the history of non-Western art from the emergence of these particular cultures into modern times.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: every fall.

FAH 109 History of Architecture **3 Credits**
Visual and cultural analysis of major monuments of global architecture from antiquity to the present.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 110 History of Photography **3 Credits**
Introduction to artistic and technical origins and subsequent developments of photographic processes from their invention in 1839 to global contemporary practices.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 159 Gender, Identity, and Art **3 Credits**
Gender, Identity, and Art encourages critical conversations around gender, race, sexuality, and class and the articulation of the intersectional nexuses among these issues in art, preparing students to negotiate the contemporary social and cultural landscape with a greater awareness. These ideas and their visualization in art throughout history will be analyzed as they relate to the formulation of featured artists' identities as well as how their art addresses an increasingly diverse and inclusive audience in the contemporary era. This course will feature a visit to the exhibition "We Wanted a Revolution: Black Radical Women, 1965–85," on view at the Albright-Knox Art Gallery from February 17 to May 27, 2018, and will tie in with special programs at the museum associated with the exhibition.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 210 Ancient Egyptian and Near Eastern Art **3 Credits**
Introduction to visual and cultural analysis and interpretation of the painting, sculpture, and architecture of ancient Egypt and the ancient Near East.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness, Oral Communication
Offered: spring.

FAH 213 Greek and Roman Art **3 Credits**
Visual and cultural analysis of the painting, sculpture, and architecture of Greece and Rome.
Fulfills College Core: Field 3 (Literature and the Arts), Oral Communication
Offered: spring.

FAH 224 Medieval Art **3 Credits**
Visual analysis, cultural analysis, and interpretation of major works of art and architecture from Early Christian, Byzantine, Islamic, Carolingian, Ottonian, Romanesque, and Gothic periods.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall or spring.

FAH 245 Renaissance Art **3 Credits**
Visual, cultural, and iconographic analysis of painting, sculpture, architecture, and art theory in Europe from the fourteenth through the sixteenth centuries.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 248 Baroque Art **3 Credits**
Visual, cultural and iconographic analysis of painting, sculpture and architecture during the 17th and 18th centuries in France, Italy, England, Spain and the Netherlands.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 261 Monet and the Age of Impressionism **3 Credits**
Visual and cultural analysis of major works from Western Europe and the United States, from the early 19th century through Post-Impressionism.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.

FAH 262 Modern Art **3 Credits**
Visual and cultural analysis of major works from Western Europe and the United States from the late 19th century through 1945.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.

FAH 265 Contemporary Art **3 Credits**
Visual and cultural analysis of major works from the United States and Western Europe from 1945 to the present.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.

FAH 266 Modern Architecture **3 Credits**
Introduction to the architectural history of the modern world, focusing on major works in western architecture from the Industrial Revolution through Post Modernism.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.

FAH 267 Frank Lloyd Wright **3 Credits**
An introduction to the influential and iconic work of American architect Frank Lloyd Wright. This course presents his major works and considers American and Modern architecture as a whole. A visit to the Darwin D. Martin House Complex is a vital component to this course.
Fulfills College Core: Field 3 (Literature and the Arts)

FAH 271 Art in Buffalo **3 Credits**
Examination of the artistic and historical resources in the Greater Buffalo region, including prominent examples of architecture, museum collections, and artists in Western New York. Course is taught completely online.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: summer.

FAH 272 Animals in Art **3 Credits**
Thematic analysis of the use of animal imagery and animals in art.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: spring of odd-numbered years.

FAH 273 Field Excursion: Connections between Museum and Zoo Exhibitry Practices **1 Credit**
Spring Break trip to Explore the portrayal of animals in museums and zoos. Students will compare and contrast the exhibitry practices in multiple museums and zoos in Amsterdam. Students will complete readings and final project while in the field. Additional fee required and varies with location (generally about $3000), which covers all travel costs. Please contact the course instructor for current fees. The course is open to students in any major. ABEC students should note that while this course will count towards the zoo biology minor, it will not count towards the ABEC major.
Offered: occasionally.

FAH 460 Museum Internship **3 Credits**
Research, curatorial, and administrative internship at selected Buffalo area art galleries.
Prerequisite: junior or senior standing. **Restriction:** art history majors and minors (or by permission of internship director).
Offered: fall, spring, & summer.

FAH 481 The Art of the Selfie **3 Credits**
An overview of the artistic expressions of portraiture limited to those identified as self-portraits. Beginning with the earliest known self-portraits onward, we will discuss the roles ascribed to self-portraits by artists, their patrons, and the 21st century connoisseur.
Fulfills College Core: Core Capstone

FAH 499 Independent Study in Art History **3 Credits**
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Fine Arts - Music (FAM)

FAM 115 Fundamentals of Music **3 Credits**
Basic elements of music as perceived and notated and the styles and forms of music derived from them. Practical theory applications include ear training, keyboard playing, and composition.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer.

FAM 119 Masterpieces of Music **3 Credits**
A survey of Western art music from medieval Gregorian chant to the present, including the study of musical elements, historical background, musical style, and masterworks of various periods.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall & spring.

FAM 122 History of Rock and Roll **3 Credits**
A survey of the history of rock and roll and its impact on American and world culture. The musical and cultural roots of rock and roll and the evolution of the style over several decades will be examined.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: Occasionally.

FAM 123 World Musics **3 Credits**
Survey course, including folk, traditional, and art music of Europe, Asia, Africa, Australia, and North and South America. Classes include listening and videos with the study of instruments, dances, songs, and rhythms of these cultures.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 124 America's Music **3 Credits**
Music made or continuously used by Americans up to the present: sacred congregational music, vernacular music, African-American music, and cultivated traditions. Historical and sociological development of folk, jazz, and popular music as uniquely American.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: spring & summer.

FAM 126 Music Performance **1 Credit**
Half-hour private lessons designed for all levels of experience are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, and conducting. For music majors, music minors, education majors with a music concentration, and music scholarship winners (no fee).
Prerequisite: permission of department chair; limited to music majors, music minors, music scholarship students, & music education students with a concentration in music.

FAM 171 Chorale **0 Credits**
A mixed-voice singing group that performs repertoire in both the classical and popular styles (Same as FAM 181 except for 0 credit).
Offered: fall & spring.

FAM 172 Jazz Ensemble **0 Credits**
Jazz ensemble that plays a wide range of music from Count Basie to Maynard Ferguson and everything in between (Same as FAM 182 except for 0 credit).
Offered: fall & spring.

FAM 174 Chamber Orchestra **0 Credits**
Chamber orchestra that performs a wide range of orchestral literature from the Baroque period through the 20th century. Concert programs provide students with wide experiences in the orchestral arts (Same as FAM 184 except for 0 credit).
Offered: fall & spring.

FAM 175 Concert Band **0 Credits**
Campus-wide instrumental ensemble performing a wide variety of standard concert band literature (Same as FAM 185 except for 0 credit).
Offered: fall & spring.

FAM 181 Chorale **1 Credit**
A mixed-voice singing group that performs repertoire in both the classical and popular styles (Same as FAM 171 except for 1 credit).
Offered: fall & spring.

FAM 182 Jazz Ensemble **1 Credit**
Jazz ensemble that plays a wide range of music from Count Basie to Maynard Ferguson and everything in between (Same as FAM 172 except for 1 credit).
Offered: fall & spring.

FAM 184 Chamber Orchestra **1 Credit**
Chamber orchestra that performs a wide range of orchestral literature from the Baroque period through the 20th century. Concert programs provide students with wide experiences in the orchestral arts. (Same as FAM 174 except for 1 credit).
Offered: fall & spring.

FAM 185 Concert Band **1 Credit**
Campus-wide instrumental ensemble performing a wide variety of standard concert band literature (Same as FAM 175 except for 1 credit).
Offered: fall & spring.

FAM 210 Keyboard Musicianship **3 Credits**
Class instruction in practical keyboard applications including basic keyboard proficiency, harmonization of folk melodies and songs, and sight-reading.
Prerequisite: permission of instructor or department chair.
Offered: occasionally.

FAM 212 Canisius and the BPO Experience **3 Credits**
Classes meet at both Canisius College and Kleinhans Music Hall as students study music on stage, behind the scenes, and in the orchestral repertory with Canisius College faculty, BPO conductors, soloists, and managers.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 213 Women in Music **3 Credits**
Roles of women composers and performers in art music from the time of ancient Greece through the present as they struggle to break the confines of traditional gender roles to gain equal representation and recognition.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 214 Music in Film **3 Credits**
Functions of music in silent film, in animation, and during the golden age of American cinema as an extension of European musical practices through the rise of the Hollywood studio system.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 216 Medieval and Renaissance Music **3 Credits**
Traces Western art music from its origins in Gregorian chant through the development and refinement of more complex compositions such as the mass setting and motet.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 217 Music of the Baroque Period **3 Credits**
A study of Western art music of the Baroque period (1600-1750) beginning with the early operatic works of Monteverdi and concluding with the mature masterpieces of Bach and Handel. Many different instrumental and vocal genres are covered in this course, including concerto, sonata, suite, opera, cantata, and oratorio.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 218 Music of the Classical Period **3 Credits**
A study of European art music c.1750-1809 and the historical and cultural forces that helped to shape it. Focus on the lives and works of Haydn, Mozart, Beethoven, their contemporaries, and immediate predecessors.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 219 19th Century Music **3 Credits**
Great composers of the Romantic period, including their lives, selected works, musical style, and influence.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 220 Art Music from 1900 to the Present **3 Credits**
Covers impressionism in music, which ushers in the twentieth century, European music 1910-1945, American music, and new music since 1945.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 221 Opera Workshop I **3 Credits**
The study and performance of scenes from operatic literature, including stage movement, acting, and historical background of operas. Perfect for students who enjoy singing and acting.
Prerequisite: permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 222 Opera Workshop II **3 Credits**
The study and performance of scenes from operatic literature, including stage movement, acting, and historical background of operas. Perfect for students who enjoy singing and acting.
Prerequisite: permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 223 The World of Music Theater **3 Credits**
The course covers basic elements of the history of musical theater: its beginnings, how it has evolved, comparison of past and current trends, performers – past and present, styles of music used, lyrics. It also explores how music theater mirrors, imitates, comments, or predicts current world affairs.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 224 Afro-Centric Music **3 Credits**
Music of West Africa and how, due to the African Diaspora, this music has come to influence both art and pop music on a worldwide basis.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 226 Music Performance **2 Credits**
Half-hour private lessons designed for all levels of experience are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, and conducting. For music majors, music minors, education majors with a music concentration, and music scholarship winners (no fee).

FAM 230 Music Theory I **3 Credits**
A study of diatonic harmonic progressions typical in the music of the 18th and 19th centuries. The course includes the analysis of melodic, harmonic, rhythmic, and formal aspects of music by composers such as Bach, Mozart, Beethoven, and Schubert. Lab required.J2171.
Prerequisite: FAM 115 or permission of instructor. **Corequisite:** FAM 230L.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall.

FAM 240 Music Theory II **3 Credits**
A study of four-part composing as developed in Europe, particularly tonal music associated with Bach, Mozart, and Beethoven. Lab required.
Prerequisite: FAM 230 or permission of instructor. **Corequisite:** FAM 240L.
Offered: spring.

FAM 250 Music for Children **3 Credits**
Course provides the backgrounds, models, and skills necessary to create musical experiences for the pre-school and elementary-age child.
Offered: occasionally.

FAM 255 Diction for Singers **3 Credits**
The study of correct pronunciation for singing in English and foreign languages using the International Phonetic Alphabet.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 330 Music Theory III **3 Credits**
19th-century styles and analysis of chromatic harmony with the study of works by Beethoven, Schubert, Franck, Wagner, and Mahler. Focus on counterpoint skills. Lab required.
Prerequisite: FAM 240. **Corequisite:** FAM 330L.
Offered: fall.

FAM 330L Music Theory III Lab **1 Credit**
Weekly lab instruction in sight-singing and ear-training. Development of aural skills in melodic, harmonic, and rhythmic dictation. Corequisite:
Prerequisite: FAM 240L. **Corequisite:** FAM 330.
Offered: fall.

FAM 390 Sounding Society **3 Credits**
Explores how music represents, instills, and challenges the values of ethics, justice, diversity, and global awareness in different societies as represented in art music as well as in popular and indigenous music.
Fulfills College Core: Core Capstone
Offered: spring.

FAM 498 Internship **3 Credits**
An internship with a business or organization related to the student's primary interest gives hands-on experience in the field. A variety of settings are possible: music or arts management, recording studio, radio station, and music retail. Internships require an application and approval by the associate dean.
Prerequisite: FAM 360 & FAM 361 or permission of department chair.
Offered: occasionally.

FAM 499 Independent Study in Music **1-3 Credits**
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: occasionally.

Fine Arts - Studio Arts (FAS)

FAS 110 Two-Dimensional Design **3 Credits**
Investigation of the formal elements and principles of design in two dimensions. Hands-on studio environment with computer-based assignments will involve students in practical and creative solutions to design problems.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer.

FAS 120 Drawing I **3 Credits**
Investigation of the formal, material, and historical fundamentals of drawing. Exercises with dry and wet media progress through perceptual rendering, collage, narrative, and imaginative drawing.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer.

FAS 130 Three-Dimensional Design **3 Credits**
Investigation of the formal elements and principles of design in three dimensions and their relationship with the space they occupy. Particular emphasis is placed on material and presentation.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall & summer.

FAS 131 Sculpture I **3 Credits**
Emphasis on traditional techniques. Assignments cover specific materials (plaster, wood, styrofoam, metal, paper) and particular techniques (armature construction, wood working, riveting, and mold making).
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: spring.

FAS 140 Introduction to Still Photography **3 Credits**
Basic techniques of photography explored through the use of 35mm cameras and film. Emphasis on the development of black and white film and the visualization process of taking pictures.
Restriction: must have 35mm camera with manual controls.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 141 Digital Photography **3 Credits**
Review basic photo skills as they relate to the operation of digital cameras. Students are introduced to the digital workflow using Photoshop to develop a personal style that is reflected in a printed and digital portfolio. No prior photo experience necessary.
Restriction: must have a D-SLR camera (digital single lens reflex camera).
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer; online.

FAS 142 Travel Photography **3 Credits**
Learn how to navigate location shoots and capture the spirit of the specific culture in front of you. Find the right location shots, maximize the light situations regardless of climate or time of day and learn proper ethical behavior for photojournalists. Review basic camera operations for both film and digital picture taking. Additional travel fee required, please contact the instructor for more information.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: every spring.

FAS 150 Color 3 Credits
Combines in-depth color theory with design and composition making learned through traditional studio set- ups and contemporary computer applications.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 160 Printmaking I 3 Credits
Introduction to the history and processes of basic printmaking, including relief printing, monoprints, pronto plate lithography, "image-on" intaglio, and other photo- sensitive and non-toxic processes.
Prerequisite: FAS 120 or permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 170 Studio Painting I 3 Credits
Investigation of the formal, material, and historical fundamentals of painting. Exercises in watercolor and acrylic paint progress through grisaille, monochromatic, limited palette, and full palette treatments of subject matters.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 220 Comics Workshop 3 Credits
This course is intended to give students hands-on experience writing and drawing comics with an emphasis on storytelling techniques unique to the medium. We will explore a wide variety of examples from the comics canon in order to illustrate abstract techniques discussed in Scott McCloud's Making Comics. Students will be given drawing assignments in order to develop an understanding of the workflow and creative tools needed to make comics as well as the sense of storytelling flow and of symbolic shorthand necessary in order to become an efficient comic artist.
Offered: occasionally.

FAS 222 Figure Drawing I 3 Credits
In-depth work with human figure as primary subject matter. Students work from model for half the semester. Emphasis on anatomical structures and expressive use of figure in composition making. Work in a range of media. Students also work on independent personal projects using figure.
Prerequisite: FAS 170.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 241 Intermediate Photography 3 Credits
In-depth study of advanced photographic processes including visual interpretation of the digital negative, the application of artificial light in the studio and field and alternative film based processes.
Prerequisites: FAS 141, FAS 142, or portfolio review.
Offered: occasionally.

FAS 260 Printmaking II 3 Credits
A continuation of printmaking processes learned in Printmaking I. Students experience a more self-guided studio environment where they are expected to build upon the techniques and processes learned in Printmaking I and expand on them in the form of practice and experimentation. Personal style and conceptual direction begin to develop alongside process.
Prerequisite: FAS 160.
Offered: occasionally.

FAS 496 Internship 3 Credits
Internships require an application and approval by the chair and the associate dean.
Prerequisite: permission of the chair & associate dean.
Offered: occasionally.

Art History Minor

A detailed description of the program, faculty, facilities, academic, and co-curricular opportunities can be found at the Art History website (https://www.canisius.edu/academics/programs/art-history/).

Requirements for the Art History Minor

The minor in art history requires six courses, some of which may also fulfill requirements in the core curriculum or the student's major.

Code	Title	Credits
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 102	Altarpieces, Academies & the Avant-Garde	3
Ancient and/or Medieval Art: one course		3
FAH 103	Survey of Pre-Columbian and Native American Art	
FAH 210	Ancient Egyptian and Near Eastern Art	
FAH 213	Greek and Roman Art	
FAH 224	Medieval Art	
Renaissance and/or Baroque Art: one course		3
FAH 245	Renaissance Art	
FAH 248	Baroque Art	
Additional FAH electives: two courses		6
COM 374	Film History	
FAH 261	Monet and the Age of Impressionism	
FAH 262	Modern Art	
FAH 265	Contemporary Art	
FAH 266	Modern Architecture	
FAH 267	Frank Lloyd Wright	
FAH 350	Topics in Art History	
HON 320	The Nude in Modern Art	
HON 321	Critical Issues in the History of Photography	
HON 322	Orchestral Music	
Total Credits		18

Program Experience

Many students take the opportunity to gain practical experience in an art institution through a Museum Internship course in addition to the minor requirements. Art history students have interned at the Albright-Knox Art Gallery, the Darwin Martin House Complex, the Buffalo History Museum, the Buffalo Central Terminal Restoration Corporation, Hallwalls Contemporary Arts Center, the Castellani Art Museum, the Buffalo Niagara Heritage Center, WNYBAC, and Big Orbit Gallery.

Creative and Performing Arts Interdisciplinary Studies (BA)

Introduction

The Creative and Performing Arts Interdisciplinary Studies degree has been designed to help students develop skills in music, the visual arts, and art history as a basis for continued study or a career in the fine arts or in other occupations where these disciplines play an integral role. The curriculum will familiarize students with the increasingly interdisciplinary aspect of the fine arts as well as the implications that has for arts administration and management. The program offers opportunity for experiential activities such

as music performance, art exhibition, and curatorial work as well as activities outside of the major requirements such as internships. In addition to the skill areas mentioned above, the major affords training in the area of aesthetics, business in the arts, and the use of social media for the arts.

Qualifications

A vocal or instrumental performance audition is required prior to formal acceptance for the Music Performance Concentration, but students may begin to take courses before the audition takes place (usually no later than the end of first academic year). The other concentrations (including that for Music Technology) do not require an audition. In order to successfully complete the major, students must have a minimum grade of C- in each course included in the major.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Some common double majors pair fine arts with communications, digital media arts, English, psychology, or education.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

All students complete required courses, fulfill the requirements of one of the concentrations (art history, music performance, music technology, or studio art), and complete electives from a second fine arts area.

Code	Title	Credits
Required Courses		
Aesthetics Course (choose one of the following)		3
PHI 291	Philosophy of Art	
PHI 292	Philosophy of Beauty	
Business in the Arts (choose one of the following)		3
ARTS 301	Arts Adminstration	
ARTS 302	Not-for-Profit Arts Organizations	
Social Media and the Arts		3
ARTS 202	Social Media and the Arts	
Fine Arts Project		3
ARTS 401	Fine Arts Project	
Primary Concentration (students many choose from art history, music performance, music theory, or studio arts; see below)		14-19
Secondary Concentration (students may choose from art history, music, or studio arts)		6
Total Credits		32-37

Primary Concentration

Art History Concentration

Code	Title	Credits
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 102	Altarpieces, Academies & the Avant-Garde	3
One course in Ancient or Medieval Art		3
FAH 210	Ancient Egyptian and Near Eastern Art	
FAH 213	Greek and Roman Art	
FAH 224	Medieval Art	
One course in Renaissance or Baroque Art		3
FAH 245	Renaissance Art	
FAH 248	Baroque Art	
One course in Art since 1800/World Art		3
FAH 103	Survey of Pre-Columbian and Native American Art	
FAH 107	Introduction to African and Asian Art	
FAH 109	History of Architecture	
FAH 262	Modern Art	
FAH 265	Contemporary Art	
FAH 271	Art in Buffalo	
HON 321	Critical Issues in the History of Photography	
Total Credits		15

Music Performance Concentration

Code	Title	Credits
FAM 119	Masterpieces of Music	3
FAM 230	Music Theory I	3
FAM 240	Music Theory II	3
Music Performance (5 semesters of hour-long lessons)		10
FAM 226	Music Performance	
Recital performed in the last semester		
Ensemble (4 semesters of the same ensemble; ensembles may be taken for 0 or 1 credit each)		
FAM 171	Chorale	
or FAM 181	Chorale	
FAM 172	Jazz Ensemble	
or FAM 182	Jazz Ensemble	
FAM 174	Chamber Orchestra	
or FAM 184	Chamber Orchestra	
Total Credits		19

Music Technology Concentration

Code	Title	Credits
FAM 230	Music Theory I	3
FAM 240	Music Theory II	3
DMA 309	Music Technology	3
DMA 310	Digital Audio/Music Production	3
Music Performance (2 semesters of 1/2 hour lessons)		2
FAM 126	Music Performance	
Ensemble (2 semestersof the same ensemble; ensembles may be taken for 0 or 1 credit each)		
FAM 171	Chorale	
or FAM 181	Chorale	
FAM 172	Jazz Ensemble	
or FAM 182	Jazz Ensemble	
FAM 174	Chamber Orchestra	
or FAM 184	Chamber Orchestra	
Total Credits		14

Studio Art Concentration

Code	Title	Credits
FAS 110	Two-Dimensional Design	3
FAS 120	Drawing I	3
FAS 130	Three-Dimensional Design	3
Choose two of the following:		6
FAS 140	Introduction to Still Photography	
FAS 141	Digital Photography	
FAS 142	Travel Photography	
FAS 150	Color	
Total Credits		15

Secondary Concentration

All students complete 6 credit hours for a secondary concentration in a different arts discipline (art history, music, or studio art). Majors with an art history concentration choose from courses in either of the music concentrations or in the studio art concentration; majors in the music performance and music technology concentrations choose from courses in the art history or the studio art concentration; majors in the studio art concentration choose from courses in either of the music concentrations or the art history concentration. Music lessons (taken for 1 or 2 credits) and music ensembles (taken for 1 credit) can be taken more than once and can accrue second area credit for those majors who choose one of the music concentrations as a second area. A single course cannot count for both the primary and secondary concentrations.

Roadmap

Recommended Semester Schedule for Major Course Requirements with Art History Concentration

Freshman

Fall	Spring
FAH 101	FAH 102
	Social Media and the Arts

Sophomore

Fall	Spring
Ancient or Medieval Art Course (Choose one)	Renaissance or Baroque Art Course (Choose one)
FAH 210	FAH 245
FAH 213	FAH 248
FAH 224	Secondary Area Elective (Studio Art or Music)
Aesthetics Course (Choose one)	
PHI 291	
PHI 292	

Junior

Fall	Spring
Art Since 1800 Course/World Art (Choose one)	Secondary Area Elective (Studio Art or Music)
FAH 103	
FAH 107	
FAH 109	
FAH 262	
FAH 265	
FAH 271	
HON 321	
Business in the Arts	

Senior

Fall
Fine Arts Project

Recommended Semester Schedule for Major Course Requirements with Music Performance Concentration

Freshman

Fall	Spring
FAM 230	FAM 240
Music Performance (FAM 226)	Music Performance Course (FAM 226)
Music Ensemble (Students are assigned to one of the following)	Music Ensemble
Chorale	Social Media and the Arts

Chamber Orchestra	
Jazz Ensemble	
Aesthetics Course (Choose one)	
PHI 291	
PHI 292	
Sophomore	
Fall	**Spring**
FAM 119	Secondary Area Elective (Art History or Studio Art)
Music Performance (FAM 226)	Music Performance (FAM 226)
Music Ensemble	Music Ensemble
Junior	
Fall	**Spring**
Fine Arts Project	Secondary Area Elective (Art History or Studio Art)
Music Performance (FAM 226)	
Music Ensemble	
Business in the Arts	

Recommended Semester Schedule for Major Course Requirements with Music Technology Concentration

Freshman	
Fall	**Spring**
FAM 230	FAM 240
Music Performance (FAM 126)	Music Performance (FAM 126)
	Social Media in the Arts Course
	DMA 309
Sophomore	
Fall	**Spring**
FAM 119	Secondary Area Elective (Art History or Studio Art)
Music Ensemble (Students are assigned to one of the following)	Music Ensemble
Chorale	
Chamber Orchestra	
Jazz Ensemble	
Aesthetics Course (Choose one)	
PHI 291	
PHI 292	
Junior	
Fall	**Spring**
Business in the Arts Course	DMA 310
	Secondary Area Elective (Art History or Studio Art)
Senior	
Fall	
Fine Arts Project	

Recommended Semester Schedule for Major Course Requirements with Studio Art Concentration

Freshman	
Fall	**Spring**
FAS 110	FAS 120
	Social Media and the Arts
Sophomore	
Fall	**Spring**
FAS 130	Studio Art Elective (Choose one)
Aesthetics Course (choose one)	FAS 140
PHI 291	FAS 141
PHI 292	FAS 142
	FAS 150
Junior	
Fall	**Spring**
Studio Art Elective	Secondary Area Elective (Art History or Music)
Business in the Arts	
Senior	
Fall	
Secondary Area Elective (Art History or Music)	
Fine Arts Project	

Learning Goals & Objectives

Student Learning Goal 1

MAJORS WILL DEMONSTRATE PROFICIENCY IN THE FINE ARTS.

Students will:

- **Objective A:** 1. Successfully complete a major project in one or in a combination of the disciplines encompassed by the program.

Student Learning Goal 2

MAJORS WILL DEVELOP AN UNDERSTANDING OF HOW SOCIAL MEDIA CAN BE USED TO PROMOTE THE FINE ARTS.

Students will:

- **Objective A:** Design a social media campaign for an artist or arts institution.

Student Learning Goal 3

MAJORS WILL DEVELOP AN UNDERSTANDING OF THE BUSINESS SIDE OF THE FINE ARTS.

Students will:

- **Objective A:** Successfully complete projects relating to the business functions proper to an individual career in the arts or an arts organization.

Courses

ARTS 202 Social Media and the Arts **3 Credits**
Students develop skills necessary to visual and performing artists and arts administrators in promoting their work or that of their cultural institution. The course teaches students how to reach and communicate with their target audiences effectively. Topics covered include website strategies, blogging, social media site management, mobile tactics, and others.
Prerequisite: None. **Corequisite:** None.
Offered: occasionally.

ARTS 301 Arts Adminstration **3 Credits**
The course is a comprehensive discussion of artist management and arts administration, promotion, marketing, contract law and negotiation, media and public relations as well as agent and manager responsibilities in the recording industry.
Prerequisite: None. **Corequisite:** None.
Offered: occasionally.

ARTS 302 Not-for-Profit Arts Organizations **3 Credits**
The course is an overview arts management, administration, promotion, and legal issues as they apply to not-for-profit arts organizations. Topics covered include basic finance for not-for profit organizations, logistics of day-to-day operations, writing grant proposals, strategies for driving revenue, and others.
Prerequisite: None. **Corequisite:** None.
Offered: occasionally.

ARTS 401 Fine Arts Project **3 Credits**
Students will be guided through a fine arts project that will demonstrate advanced accomplishment related to their concentration in the Creative and Performing Arts Interdisciplinary Studies degree. Projects could be an extended paper, a musical performance, an audio technology project, a gallery show, or any other appropriate medium. Students will be mentored by appropriate faculty and will provide regular reports and demonstrations of progress throughout the semester.
Corequisite: None.
Offered: occasionally.

FAH 101 Cave Paintings, the Colosseum & Cathedrals **3 Credits**
Introduction to visual and cultural analysis of major works of art from prehistory through the Middle Ages. Covers prehistoric through Gothic art.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall, spring, & summer.

FAH 102 Altarpieces, Academies & the Avant-Garde **3 Credits**
Introduction to visual and cultural analysis of major works of Western art from the Renaissance through the contemporary moment.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall, spring, & summer.

FAH 103 Survey of Pre-Columbian and Native American Art **3 Credits**
The artistic achievements of native peoples from the Americas. Toltec, Maya, and Aztec civilizations of Central America, and culture groups from the Woodlands, Plains, Southwest, and Northwest in North America prior to and after contact with Europe.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: fall.

FAH 107 Introduction to African and Asian Art **3 Credits**
Beginning with a discussion about the Silk Road, art of the Asian and African continents and the Pacific Ocean cultures are central topics. This course is an introduction to the history of non-Western art from the emergence of these particular cultures into modern times.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: every fall.

FAH 109 History of Architecture **3 Credits**
Visual and cultural analysis of major monuments of global architecture from antiquity to the present.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 110 History of Photography **3 Credits**
Introduction to artistic and technical origins and subsequent developments of photographic processes from their invention in 1839 to global contemporary practices.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 159 Gender, Identity, and Art **3 Credits**
Gender, Identity, and Art encourages critical conversations around gender, race, sexuality, and class and the articulation of the intersectional nexuses among these issues in art, preparing students to negotiate the contemporary social and cultural landscape with a greater awareness. These ideas and their visualization in art throughout history will be analyzed as they relate to the formulation of featured artists' identities as well as how their art addresses an increasingly diverse and inclusive audience in the contemporary era. This course will feature a visit to the exhibition "We Wanted a Revolution: Black Radical Women, 1965–85," on view at the Albright-Knox Art Gallery from February 17 to May 27, 2018, and will tie in with special programs at the museum associated with the exhibition.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 210 Ancient Egyptian and Near Eastern Art **3 Credits**
Introduction to visual and cultural analysis and interpretation of the painting, sculpture, and architecture of ancient Egypt and the ancient Near East.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness, Oral Communication
Offered: spring.

FAH 213 Greek and Roman Art **3 Credits**
Visual and cultural analysis of the painting, sculpture, and architecture of Greece and Rome.
Fulfills College Core: Field 3 (Literature and the Arts), Oral Communication
Offered: spring.

FAH 224 Medieval Art **3 Credits**
Visual analysis, cultural analysis, and interpretation of major works of art and architecture from Early Christian, Byzantine, Islamic, Carolingian, Ottonian, Romanesque, and Gothic periods.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall or spring.

FAH 245 Renaissance Art **3 Credits**
Visual, cultural, and iconographic analysis of painting, sculpture, architecture, and art theory in Europe from the fourteenth through the sixteenth centuries.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 248 Baroque Art **3 Credits**
Visual, cultural and iconographic analysis of painting, sculpture and architecture during the 17th and 18th centuries in France, Italy, England, Spain and the Netherlands.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 261 Monet and the Age of Impressionism **3 Credits**
Visual and cultural analysis of major works from Western Europe and the United States, from the early 19th century through Post-Impressionism.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.

FAH 262 Modern Art **3 Credits**
Visual and cultural analysis of major works from Western Europe and the United States from the late 19th century through 1945.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.

FAH 265 Contemporary Art **3 Credits**
Visual and cultural analysis of major works from the United States and Western Europe from 1945 to the present.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.

FAH 266 Modern Architecture **3 Credits**
Introduction to the architectural history of the modern world, focusing on major works in western architecture from the Industrial Revolution through Post Modernism.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.

FAH 267 Frank Lloyd Wright **3 Credits**
An introduction to the influential and iconic work of American architect Frank Lloyd Wright. This course presents his major works and considers American and Modern architecture as a whole. A visit to the Darwin D. Martin House Complex is a vital component to this course.
Fulfills College Core: Field 3 (Literature and the Arts)

FAH 271 Art in Buffalo **3 Credits**
Examination of the artistic and historical resources in the Greater Buffalo region, including prominent examples of architecture, museum collections, and artists in Western New York. Course is taught completely online.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: summer.

FAH 272 Animals in Art **3 Credits**
Thematic analysis of the use of animal imagery and animals in art.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
Offered: spring of odd-numbered years.

FAH 273 Field Excursion: Connections between Museum and Zoo Exhibitry Practices **1 Credit**
Spring Break trip to Explore the portrayal of animals in museums and zoos. Students will compare and contrast the exhibitry practices in multiple museums and zoos in Amsterdam. Students will complete readings and final project while in the field. Additional fee required and varies with location (generally about $3000), which covers all travel costs. Please contact the course instructor for current fees. The course is open to students in any major. ABEC students should note that while this course will count towards the zoo biology minor, it will not count towards the ABEC major.
Offered: occasionally.

FAH 460 Museum Internship **3 Credits**
Research, curatorial, and administrative internship at selected Buffalo area art galleries.
Prerequisite: junior or senior standing. **Restriction:** art history majors and minors (or by permission of internship director).
Offered: fall, spring, & summer.

FAH 481 The Art of the Selfie **3 Credits**
An overview of the artistic expressions of portraiture limited to those identified as self-portraits. Beginning with the earliest known self-portraits onward, we will discuss the roles ascribed to self-portraits by artists, their patrons, and the 21st century connoisseur.
Fulfills College Core: Core Capstone

FAH 499 Independent Study in Art History **3 Credits**
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

FAM 115 Fundamentals of Music **3 Credits**
Basic elements of music as perceived and notated and the styles and forms of music derived from them. Practical theory applications include ear training, keyboard playing, and composition.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer.

FAM 119 Masterpieces of Music **3 Credits**
A survey of Western art music from medieval Gregorian chant to the present, including the study of musical elements, historical background, musical style, and masterworks of various periods.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall & spring.

FAM 122 History of Rock and Roll **3 Credits**
A survey of the history of rock and roll and its impact on American and world culture. The musical and cultural roots of rock and roll and the evolution of the style over several decades will be examined.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: Occasionally.

FAM 123 World Musics **3 Credits**
Survey course, including folk, traditional, and art music of Europe, Asia, Africa, Australia, and North and South America. Classes include listening and videos with the study of instruments, dances, songs, and rhythms of these cultures.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 124 America's Music **3 Credits**
Music made or continuously used by Americans up to the present: sacred congregational music, vernacular music, African-American music, and cultivated traditions. Historical and sociological development of folk, jazz, and popular music as uniquely American.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: spring & summer.

FAM 126 Music Performance **1 Credit**
Half-hour private lessons designed for all levels of experience are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, and conducting. For music majors, music minors, education majors with a music concentration, and music scholarship winners (no fee).
Prerequisite: permission of department chair; limited to music majors, music minors, music scholarship students, & music education students with a concentration in music.

FAM 171 Chorale **0 Credits**
A mixed-voice singing group that performs repertoire in both the classical and popular styles (Same as FAM 181 except for 0 credit).
Offered: fall & spring.

FAM 172 Jazz Ensemble **0 Credits**
Jazz ensemble that plays a wide range of music from Count Basie to Maynard Ferguson and everything in between (Same as FAM 182 except for 0 credit).
Offered: fall & spring.

FAM 174 Chamber Orchestra **0 Credits**
Chamber orchestra that performs a wide range of orchestral literature from the Baroque period through the 20th century. Concert programs provide students with wide experiences in the orchestral arts (Same as FAM 184 except for 0 credit).
Offered: fall & spring.

FAM 175 Concert Band **0 Credits**
Campus-wide instrumental ensemble performing a wide variety of standard concert band literature (Same as FAM 185 except for 0 credit).
Offered: fall & spring.

FAM 181 Chorale **1 Credit**
A mixed-voice singing group that performs repertoire in both the classical and popular styles (Same as FAM 171 except for 1 credit).
Offered: fall & spring.

FAM 182 Jazz Ensemble **1 Credit**
Jazz ensemble that plays a wide range of music from Count Basie to Maynard Ferguson and everything in between (Same as FAM 172 except for 1 credit).
Offered: fall & spring.

FAM 184 Chamber Orchestra **1 Credit**
Chamber orchestra that performs a wide range of orchestral literature from the Baroque period through the 20th century. Concert programs provide students with wide experiences in the orchestral arts. (Same as FAM 174 except for 1 credit).
Offered: fall & spring.

FAM 185 Concert Band **1 Credit**
Campus-wide instrumental ensemble performing a wide variety of standard concert band literature (Same as FAM 175 except for 1 credit).
Offered: fall & spring.

FAM 210 Keyboard Musicianship **3 Credits**
Class instruction in practical keyboard applications including basic keyboard proficiency, harmonization of folk melodies and songs, and sight-reading.
Prerequisite: permission of instructor or department chair.
Offered: occasionally.

FAM 212 Canisius and the BPO Experience **3 Credits**
Classes meet at both Canisius College and Kleinhans Music Hall as students study music on stage, behind the scenes, and in the orchestral repertory with Canisius College faculty, BPO conductors, soloists, and managers.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 213 Women in Music **3 Credits**
Roles of women composers and performers in art music from the time of ancient Greece through the present as they struggle to break the confines of traditional gender roles to gain equal representation and recognition.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 214 Music in Film **3 Credits**
Functions of music in silent film, in animation, and during the golden age of American cinema as an extension of European musical practices through the rise of the Hollywood studio system.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 216 Medieval and Renaissance Music **3 Credits**
Traces Western art music from its origins in Gregorian chant through the development and refinement of more complex compositions such as the mass setting and motet.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 217 Music of the Baroque Period **3 Credits**
A study of Western art music of the Baroque period (1600-1750) beginning with the early operatic works of Monteverdi and concluding with the mature masterpieces of Bach and Handel. Many different instrumental and vocal genres are covered in this course, including concerto, sonata, suite, opera, cantata, and oratorio.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 218 Music of the Classical Period **3 Credits**
A study of European art music c.1750-1809 and the historical and cultural forces that helped to shape it. Focus on the lives and works of Haydn, Mozart, Beethoven, their contemporaries, and immediate predecessors.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 219 19th Century Music **3 Credits**
Great composers of the Romantic period, including their lives, selected works, musical style, and influence.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 220 Art Music from 1900 to the Present **3 Credits**
Covers impressionism in music, which ushers in the twentieth century, European music 1910-1945, American music, and new music since 1945.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 221 Opera Workshop I **3 Credits**
The study and performance of scenes from operatic literature, including stage movement, acting, and historical background of operas. Perfect for students who enjoy singing and acting.
Prerequisite: permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 222 Opera Workshop II **3 Credits**
The study and performance of scenes from operatic literature, including stage movement, acting, and historical background of operas. Perfect for students who enjoy singing and acting.
Prerequisite: permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 223 The World of Music Theater **3 Credits**
The course covers basic elements of the history of musical theater: its beginnings, how it has evolved, comparison of past and current trends, performers – past and present, styles of music used, lyrics. It also explores how music theater mirrors, imitates, comments, or predicts current world affairs.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 224 Afro-Centric Music **3 Credits**
Music of West Africa and how, due to the African Diaspora, this music has come to influence both art and pop music on a worldwide basis.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 226 Music Performance **2 Credits**
Half-hour private lessons designed for all levels of experience are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, and conducting. For music majors, music minors, education majors with a music concentration, and music scholarship winners (no fee).

FAM 230 Music Theory I **3 Credits**
A study of diatonic harmonic progressions typical in the music of the 18th and 19th centuries. The course includes the analysis of melodic, harmonic, rhythmic, and formal aspects of music by composers such as Bach, Mozart, Beethoven, and Schubert. Lab required.J2171.
Prerequisite: FAM 115 or permission of instructor. **Corequisite:** FAM 230L.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall.

FAM 240 Music Theory II **3 Credits**
A study of four-part composing as developed in Europe, particularly tonal music associated with Bach, Mozart, and Beethoven. Lab required.
Prerequisite: FAM 230 or permission of instructor. **Corequisite:** FAM 240L.
Offered: spring.

FAM 250 Music for Children **3 Credits**
Course provides the backgrounds, models, and skills necessary to create musical experiences for the pre-school and elementary-age child.
Offered: occasionally.

FAM 255 Diction for Singers **3 Credits**
The study of correct pronunciation for singing in English and foreign languages using the International Phonetic Alphabet.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 330 Music Theory III **3 Credits**
19th-century styles and analysis of chromatic harmony with the study of works by Beethoven, Schubert, Franck, Wagner, and Mahler. Focus on counterpoint skills. Lab required.
Prerequisite: FAM 240. **Corequisite:** FAM 330L.
Offered: fall.

FAM 330L Music Theory III Lab **1 Credit**
Weekly lab instruction in sight-singing and ear-training. Development of aural skills in melodic, harmonic, and rhythmic dictation. Corequisite:
Prerequisite: FAM 240L. **Corequisite:** FAM 330.
Offered: fall.

FAM 390 Sounding Society **3 Credits**
Explores how music represents, instills, and challenges the values of ethics, justice, diversity, and global awareness in different societies as represented in art music as well as in popular and indigenous music.
Fulfills College Core: Core Capstone
Offered: spring.

FAM 498 Internship **3 Credits**
An internship with a business or organization related to the student's primary interest gives hands-on experience in the field. A variety of settings are possible: music or arts management, recording studio, radio station, and music retail. Internships require an application and approval by the associate dean.
Prerequisite: FAM 360 & FAM 361 or permission of department chair.
Offered: occasionally.

FAM 499 Independent Study in Music **1-3 Credits**
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: occasionally.

FAS 110 Two-Dimensional Design **3 Credits**
Investigation of the formal elements and principles of design in two dimensions. Hands-on studio environment with computer-based assignments will involve students in practical and creative solutions to design problems.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer.

FAS 120 Drawing I **3 Credits**
Investigation of the formal, material, and historical fundamentals of drawing. Exercises with dry and wet media progress through perceptual rendering, collage, narrative, and imaginative drawing.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer.

FAS 130 Three-Dimensional Design **3 Credits**
Investigation of the formal elements and principles of design in three dimensions and their relationship with the space they occupy. Particular emphasis is placed on material and presentation.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall & summer.

FAS 131 Sculpture I **3 Credits**
Emphasis on traditional techniques. Assignments cover specific materials (plaster, wood, styrofoam, metal, paper) and particular techniques (armature construction, wood working, riveting, and mold making).
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: spring.

FAS 140 Introduction to Still Photography **3 Credits**
Basic techniques of photography explored through the use of 35mm cameras and film. Emphasis on the development of black and white film and the visualization process of taking pictures.
Restriction: must have 35mm camera with manual controls.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 141 Digital Photography **3 Credits**
Review basic photo skills as they relate to the operation of digital cameras. Students are introduced to the digital workflow using Photoshop to develop a personal style that is reflected in a printed and digital portfolio. No prior photo experience necessary.
Restriction: must have a D-SLR camera (digital single lens reflex camera).
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer; online.

FAS 142 Travel Photography **3 Credits**
Learn how to navigate location shoots and capture the spirit of the specific culture in front of you. Find the right location shots, maximize the light situations regardless of climate or time of day and learn proper ethical behavior for photojournalists. Review basic camera operations for both film and digital picture taking. Additional travel fee required, please contact the instructor for more information.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: every spring.

FAS 150 Color **3 Credits**
Combines in-depth color theory with design and composition making learned through traditional studio set- ups and contemporary computer applications.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 160 Printmaking I **3 Credits**
Introduction to the history and processes of basic printmaking, including relief printing, monoprints, pronto plate lithography, "image-on" intaglio, and other photo- sensitive and non-toxic processes.
Prerequisite: FAS 120 or permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 170 Studio Painting I **3 Credits**
Investigation of the formal, material, and historical fundamentals of painting. Exercises in watercolor and acrylic paint progress through grisaille, monochromatic, limited palette, and full palette treatments of subject matters.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 220 Comics Workshop **3 Credits**
This course is intended to give students hands-on experience writing and drawing comics with an emphasis on storytelling techniques unique to the medium. We will explore a wide variety of examples from the comics canon in order to illustrate abstract techniques discussed in Scott McCloud's Making Comics. Students will be given drawing assignments in order to develop an understanding of the workflow and creative tools needed to make comics as well as the sense of storytelling flow and of symbolic shorthand necessary in order to become an efficient comic artist.
Offered: occasionally.

FAS 222 Figure Drawing I **3 Credits**
In-depth work with human figure as primary subject matter. Students work from model for half the semester. Emphasis on anatomical structures and expressive use of figure in composition making. Work in a range of media. Students also work on independent personal projects using figure.
Prerequisite: FAS 170.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAS 241 Intermediate Photography **3 Credits**
In-depth study of advanced photographic processes including visual interpretation of the digital negative, the application of artificial light in the studio and field and alternative film based processes.
Prerequisites: FAS 141, FAS 142, or portfolio review.
Offered: occasionally.

FAS 260 Printmaking II **3 Credits**
A continuation of printmaking processes learned in Printmaking I. Students experience a more self-guided studio environment where they are expected to build upon the techniques and processes learned in Printmaking I and expand on them in the form of practice and experimentation. Personal style and conceptual direction begin to develop alongside process.
Prerequisite: FAS 160.
Offered: occasionally.

FAS 496 Internship **3 Credits**
Internships require an application and approval by the chair and the associate dean.
Prerequisite: permission of the chair & associate dean.
Offered: occasionally.

Music Minor

A more detailed description of the faculty, facilities, academic, and co-curricular opportunities can be found at the Music Program website (https://www.canisius.edu/academics/programs/music/).

Curriculum

The music minor enables students majoring in other academic departments to complement their studies with the study of music. The 18-credit program includes courses in theory and music history and can include music performance.

Code	Title	Credits
FAM 115	Fundamentals of Music [1]	3
FAM 119	Masterpieces of Music	3
Select two of the following:		6
FAM 122	History of Rock and Roll	
FAM 123	World Musics	
FAM 124	America's Music	
FAM 212	Canisius and the BPO Experience	
FAM 213	Women in Music	
FAM 214	Music in Film	
FAM 216	Medieval and Renaissance Music	
FAM 217	Music of the Baroque Period	
FAM 218	Music of the Classical Period	
FAM 219	19th Century Music	
FAM 220	Art Music from 1900 to the Present	
FAM 221	Opera Workshop I	
or FAM 222	Opera Workshop II	
FAM 223	The World of Music Theater	
FAM 224	Afro-Centric Music	
Select 6 credits from the following:		6
Any combination of FAM courses, music ensembles and music lessons		
DMA 309	Music Technology [2]	
DMA 310	Digital Audio/Music Production [2]	
HON 322	Orchestral Music	
HON 323	Opera	
HON 324	The Symphony	
HON 326	Art Song	
Total Credits		18

1 If the student has sufficient theory background as demonstrated by a placement test, another FAM theory course may be substituted for FAM 115.

2 **Note:** DMA 309 and DMA 310 are offered in alternate years.

Courses

FAM 115 Fundamentals of Music **3 Credits**
Basic elements of music as perceived and notated and the styles and forms of music derived from them. Practical theory applications include ear training, keyboard playing, and composition.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer.

FAM 119 Masterpieces of Music **3 Credits**
A survey of Western art music from medieval Gregorian chant to the present, including the study of musical elements, historical background, musical style, and masterworks of various periods.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall & spring.

FAM 122 History of Rock and Roll **3 Credits**
A survey of the history of rock and roll and its impact on American and world culture. The musical and cultural roots of rock and roll and the evolution of the style over several decades will be examined.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: Occasionally.

FAM 123 World Musics **3 Credits**
Survey course, including folk, traditional, and art music of Europe, Asia, Africa, Australia, and North and South America. Classes include listening and videos with the study of instruments, dances, songs, and rhythms of these cultures.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 124 America's Music **3 Credits**
Music made or continuously used by Americans up to the present: sacred congregational music, vernacular music, African-American music, and cultivated traditions. Historical and sociological development of folk, jazz, and popular music as uniquely American.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: spring & summer.

FAM 126 Music Performance **1 Credit**
Half-hour private lessons designed for all levels of experience are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, and conducting. For music majors, music minors, education majors with a music concentration, and music scholarship winners (no fee).
Prerequisite: permission of department chair; limited to music majors, music minors, music scholarship students, & music education students with a concentration in music.

FAM 171 Chorale **0 Credits**
A mixed-voice singing group that performs repertoire in both the classical and popular styles (Same as FAM 181 except for 0 credit).
Offered: fall & spring.

FAM 172 Jazz Ensemble **0 Credits**
Jazz ensemble that plays a wide range of music from Count Basie to Maynard Ferguson and everything in between (Same as FAM 182 except for 0 credit).
Offered: fall & spring.

FAM 174 Chamber Orchestra **0 Credits**
Chamber orchestra that performs a wide range of orchestral literature from the Baroque period through the 20th century. Concert programs provide students with wide experiences in the orchestral arts (Same as FAM 184 except for 0 credit).
Offered: fall & spring.

FAM 175 Concert Band **0 Credits**
Campus-wide instrumental ensemble performing a wide variety of standard concert band literature (Same as FAM 185 except for 0 credit).
Offered: fall & spring.

FAM 181 Chorale **1 Credit**
A mixed-voice singing group that performs repertoire in both the classical and popular styles (Same as FAM 171 except for 1 credit).
Offered: fall & spring.

FAM 182 Jazz Ensemble **1 Credit**
Jazz ensemble that plays a wide range of music from Count Basie to Maynard Ferguson and everything in between (Same as FAM 172 except for 1 credit).
Offered: fall & spring.

FAM 184 Chamber Orchestra **1 Credit**
Chamber orchestra that performs a wide range of orchestral literature from the Baroque period through the 20th century. Concert programs provide students with wide experiences in the orchestral arts. (Same as FAM 174 except for 1 credit).
Offered: fall & spring.

FAM 185 Concert Band **1 Credit**
Campus-wide instrumental ensemble performing a wide variety of standard concert band literature (Same as FAM 175 except for 1 credit).
Offered: fall & spring.

FAM 210 Keyboard Musicianship **3 Credits**
Class instruction in practical keyboard applications including basic keyboard proficiency, harmonization of folk melodies and songs, and sight-reading.
Prerequisite: permission of instructor or department chair.
Offered: occasionally.

FAM 212 Canisius and the BPO Experience **3 Credits**
Classes meet at both Canisius College and Kleinhans Music Hall as students study music on stage, behind the scenes, and in the orchestral repertory with Canisius College faculty, BPO conductors, soloists, and managers.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 213 Women in Music **3 Credits**
Roles of women composers and performers in art music from the time of ancient Greece through the present as they struggle to break the confines of traditional gender roles to gain equal representation and recognition.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 214 Music in Film **3 Credits**
Functions of music in silent film, in animation, and during the golden age of American cinema as an extension of European musical practices through the rise of the Hollywood studio system.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 216 Medieval and Renaissance Music **3 Credits**
Traces Western art music from its origins in Gregorian chant through the development and refinement of more complex compositions such as the mass setting and motet.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 217 Music of the Baroque Period **3 Credits**
A study of Western art music of the Baroque period (1600-1750) beginning with the early operatic works of Monteverdi and concluding with the mature masterpieces of Bach and Handel. Many different instrumental and vocal genres are covered in this course, including concerto, sonata, suite, opera, cantata, and oratorio.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 218 Music of the Classical Period **3 Credits**
A study of European art music c.1750-1809 and the historical and cultural forces that helped to shape it. Focus on the lives and works of Haydn, Mozart, Beethoven, their contemporaries, and immediate predecessors.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 219 19th Century Music **3 Credits**
Great composers of the Romantic period, including their lives, selected works, musical style, and influence.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 220 Art Music from 1900 to the Present **3 Credits**
Covers impressionism in music, which ushers in the twentieth century, European music 1910-1945, American music, and new music since 1945.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 221 Opera Workshop I **3 Credits**
The study and performance of scenes from operatic literature, including stage movement, acting, and historical background of operas. Perfect for students who enjoy singing and acting.
Prerequisite: permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 222 Opera Workshop II **3 Credits**
The study and performance of scenes from operatic literature, including stage movement, acting, and historical background of operas. Perfect for students who enjoy singing and acting.
Prerequisite: permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 223 The World of Music Theater **3 Credits**
The course covers basic elements of the history of musical theater: its beginnings, how it has evolved, comparison of past and current trends, performers – past and present, styles of music used, lyrics. It also explores how music theater mirrors, imitates, comments, or predicts current world affairs.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 224 Afro-Centric Music **3 Credits**
Music of West Africa and how, due to the African Diaspora, this music has come to influence both art and pop music on a worldwide basis.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.

FAM 226 Music Performance **2 Credits**
Half-hour private lessons designed for all levels of experience are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, and conducting. For music majors, music minors, education majors with a music concentration, and music scholarship winners (no fee).

FAM 230 Music Theory I **3 Credits**
A study of diatonic harmonic progressions typical in the music of the 18th and 19th centuries. The course includes the analysis of melodic, harmonic, rhythmic, and formal aspects of music by composers such as Bach, Mozart, Beethoven, and Schubert. Lab required.J2171.
Prerequisite: FAM 115 or permission of instructor. **Corequisite:** FAM 230L.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall.

FAM 240 Music Theory II **3 Credits**
A study of four-part composing as developed in Europe, particularly tonal music associated with Bach, Mozart, and Beethoven. Lab required.
Prerequisite: FAM 230 or permission of instructor. **Corequisite:** FAM 240L.
Offered: spring.

FAM 250 Music for Children **3 Credits**
Course provides the backgrounds, models, and skills necessary to create musical experiences for the pre-school and elementary-age child.
Offered: occasionally.

FAM 255 Diction for Singers **3 Credits**
The study of correct pronunciation for singing in English and foreign languages using the International Phonetic Alphabet.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 330 Music Theory III **3 Credits**
19th-century styles and analysis of chromatic harmony with the study of works by Beethoven, Schubert, Franck, Wagner, and Mahler. Focus on counterpoint skills. Lab required.
Prerequisite: FAM 240. **Corequisite:** FAM 330L.
Offered: fall.

FAM 330L Music Theory III Lab **1 Credit**
Weekly lab instruction in sight-singing and ear-training. Development of aural skills in melodic, harmonic, and rhythmic dictation. Corequisite:
Prerequisite: FAM 240L. **Corequisite:** FAM 330.
Offered: fall.

FAM 390 Sounding Society **3 Credits**
Explores how music represents, instills, and challenges the values of ethics, justice, diversity, and global awareness in different societies as represented in art music as well as in popular and indigenous music.
Fulfills College Core: Core Capstone
Offered: spring.

FAM 498 Internship **3 Credits**
An internship with a business or organization related to the student's primary interest gives hands-on experience in the field. A variety of settings are possible: music or arts management, recording studio, radio station, and music retail. Internships require an application and approval by the associate dean.
Prerequisite: FAM 360 & FAM 361 or permission of department chair.
Offered: occasionally.

FAM 499 Independent Study in Music **1-3 Credits**
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: occasionally.

Studio Art Minor

Introduction

Canisius College offers a minor in studio art, and classes are open to all students. Studio art courses introduce fundamentals in both technique and artistic conceptualization. The program is intended to provide students with an opportunity to explore options in studio art and to prepare students interested in art as a profession for further undergraduate study at an art school or in a major degree program.

Students also have the opportunity to hear lectures by contemporary artists on and off campus and to visit art exhibits at local galleries and museums; they also are encouraged to attend seminars and workshops at local art venues that introduce them to recent trends in contemporary art. Viewing, critiquing, and writing about art give students a solid grounding for

confidently and articulately speaking and writing about their own work and that of their peers.

Students are encouraged to exhibit their work both on and off campus in special events, such as Ignatian Scholarship Day, and in the Peter A. and Mary Lou Vogt Art Gallery located in Lyons Hall.

A more detailed description of the program, faculty, facilities, academic, and co-curricular opportunities can be found at the Studio Art webpage (https://www.canisius.edu/academics/programs/studio-art/).

Advisement

All students should have an advisor in the minor and should contact the Fine Arts Department Chair directly to have an advisor assigned if they do not already have one. All minors should work closely with their advisor in discussing career expectations, choosing their minor electives, developing their entire academic program, and planning their co-curricular or supplemental academic experiences.

Studio art courses place emphasis on both technical and conceptual skills through lectures, demonstrations, practice, and critique. The minor requires six courses (18 credit hours):

Code	Title	Credits
Required Courses		
FAS 110	Two-Dimensional Design	3
FAS 120	Drawing I	3
FAS 130	Three-Dimensional Design	3
Additional FAS Courses		
Select three of the following:		9
FAS 131	Sculpture I	
FAS 140	Introduction to Still Photography	
FAS 141	Digital Photography	
FAS 142	Travel Photography	
FAS 150	Color	
FAS 160	Printmaking I	
FAS 170	Studio Painting I	
FAS 220	Comics Workshop	
FAS 222	Figure Drawing I	
FAS 260	Printmaking II	
Total Credits		18

Learning Goals & Objectives

Learning Goal 1

Studio Art students will use visual design terminology in speaking and writing.

Students will:

- **Objective A**: Define the elements and principles of design in visual art through group discussion and critique.
- **Objective B**: Write an artist's statement, reflective paper or critique using technical terms to communicate ideas using technical terms.

Learning Goal 2

Studio Art students will develop technical skills.

Students will:

- **Objective A**: Utilize hand/eye coordination to render from life realistically
- **Objective B**: Utilize skills specific to different studio disciplines such as woodworking, printmaking, carving, sculpting or photography to create work in those fields.

Learning Goal 3

Studio Art students will use written and verbal skills to articulate concepts and techniques critically.

Students will:

- **Objective A**: Explicate the rationale behind their work materially, conceptually and formally in an artist statement
- **Objective B**: Engage in critical discourse on their work and the work of their peers during group critiques.

Learning Goal 4

Studio Art students will describe developments and trends in art history and contemporary art via artist statement and group critique.

Students will:

- **Objective A**: Position their work within a contemporary artistic framework and compare their work within larger art historical themes both written and orally.
- **Objective B**: Evaluate any given piece of art within a contemporary framework and find its fundamental historical significance during group critiques and in written statements or reflection papers.

Learning Goal 5

Studio Art students will experience placing work on public display.

Students will:

- **Objective A**: Locate galleries or venues appropriate for the display of their work.
- **Objective B**: Curate and hang their work for exhibition.

History (BA)

Chair: Richard Bailey, PhD

Introduction

Students of history see the past as a fascinating and constantly changing place. They explore the past and develop understanding of the process of change over time by carefully examining evidence relevant to the specific cultures, periods, and geographic regions that excite their interest. History students at Canisius pursue their interests through a wide variety of courses ranging from the ancient to the modern periods, focusing on various geographical regions, and incorporating diverse political, social, economic, cultural, and intellectual themes. They learn that the historian's craft is multifaceted, incorporating not only knowledge of particular events and people, but also skills in critical thinking and both expository and argumentative writing. By emphasizing those skills, the study of history provides excellent preparation for careers in law, communications, journalism, library science, government service, teaching, and business. For a more detailed description of our program, faculty, and academic and co-curricular opportunities please go to the History Department website (https://www.canisius.edu/academics/programs/history/).

Qualifications

Students must maintain a 2.0 overall average to graduate with a degree in history.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Major Experiences

The history department offers a departmental honors program consisting of two advanced seminars: HIS 401 Historical Methodology and HIS 411 Senior Honors Thesis. These courses are designed to develop the research, writing, and analytical skills necessary for graduate and professional school. Students who complete HIS 401 and HIS 411 with a 3.25 average, and a 3.00 average in all their history courses, graduate with honors in history. The History Honors program is appropriate for students majoring in history as well as Social Studies Education. It is compatible with the All-College Honors Program as well as the Core Curriculum. History majors also pursue a variety of off-campus experiences. Canisius offers study abroad programs in Europe, Asia, Latin America, and Australia; any of these programs can be combined with the history major. The department offers a variety of opportunities for academic travel. In recent years students and faculty members have combined travel with study of the Holocaust, the American Civil Rights Movement, and Native American History. History students also undertake internships which offer the opportunity to explore opportunities outside academia, particularly in the exciting field of public history. A variety of extracurricular and co-curricular activities are organized by the History Club. Qualified students are invited to join Phi Alpha Theta, the national honors society in history.

Additional Course Considerations

Students majoring in history are strongly encouraged to study either an ancient or modern foreign language. Foreign language study is essential for those who plan to study history at the graduate level; at the undergraduate level, it plays a vital role in achieving the Core goal of global awareness as well as the history program's objective of developing historical knowledge which is characterized by geographical and cultural breadth.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

History is multifaceted; its students find connections with nearly every other discipline. Our students pursue dual majors in a wide variety of fields including Anthropology, Business, Communications, English, European Studies, International Relations, Mathematics, Modern Languages, Philosophy, Political Science, Psychology, and Urban Studies. History majors also pursue Pre-Law and Pre-Medical programs.

History majors interested in teaching at the secondary level often pursue a dual major in history and Adolescent Education/Social Studies. Those interested in this option should consult with faculty members in both departments to coordinate the dual major. Alternatively, history majors may enter the teaching profession by pursuing a master's in education. Those interested in this "five year plan" should consult with their advisor in the department.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

The History major consists of twelve three-credit courses for a total of 36 credits. At least one course must be from the period before 1800. A maximum of four 100-level courses, including transfer and AP courses, can be applied to the major.

Code	Title	Credits
HIS 299	Historian's Craft	3
American History: two courses		6
One course must be at the 300-level		
European History: two courses		6
One course must be at the 300-level		
Africa/Asia/Latin American History: two courses		6
One course must be at the 300-level		
Senior Seminar		3
Major elective: 1 history course at the 300 level		3
Major electives (3 courses)		9
Total Credits		36

Courses at the 100 and 200 level assume no prior college-level study. They are introductory courses for the major, and satisfy Field 4 requirements in the Core Curriculum. 100-level courses are broad surveys which furnish students with a general knowledge of the history and traditions of various regions and periods. 200-level courses are somewhat more specific in approach, focusing on individual nations outside the United States, specific populations, or particular themes. Both 100- and 200-level courses provide the student with an intellectual and chronological framework for further historical study and for work in other disciplines. Courses at the 300 and 400 level deal with a wide variety of specialized areas of historical inquiry. Some courses focus on major national or geographic areas, while others emphasize period, topical, thematic, or methodological approaches. These upper-level courses provide students with an opportunity for further development of their historical understanding as well as their skills in writing and critical thinking. They are appropriate for history majors and minors and for non-majors who have completed the Field 4 requirement and wish to continue their study of history at a more advanced level.

Roadmap

Freshman	
Fall	**Spring**
1-2 History courses	1-2 History courses
Sophomore	
Fall	**Spring**
HIS 299	1-2 History courses
One History course	
Junior	
Fall	**Spring**
1-2 History courses	1-2 History courses
Senior	
Fall	**Spring**
1 -2 History courses	Senior History Seminar

Learning Goals & Objectives

Student Learning Goal 1

Majors will develop skills in historical writing.

Students will:

- Objective A: Compose a chronological narrative;
- Objective B: Construct a thesis, and support it with historical evidence;
- Objective C: Evaluate historical evidence in a variety of primary and secondary sources;
- Objective D: the ability to use citation practices appropriate to the historical profession to document evidence found in a variety of sources.

Student Learning Goal 2

Majors will learn to think historically.

Students will:

- Objective A: Assess the significance of events, ideas, or artifacts in their historical context;
- Objective B: Distinguish cause and effect and recognize multiple causalities in history;
- Objective C: Recognize and evaluate different historical interpretations.

Minor

The history minor complements majors in other academic departments by providing students with exposure to the study of history that is both comprehensive and intensive. The minor is appropriate for any student who enjoys and wants to pursue an interest in history. Students in related disciplines such as Business, English, Communications, Modern Languages, Psychology, Political Science, Philosophy, and Religious Studies, as well as students interested in law, may be especially interested in the history minor.

The history minor consists of seven three-credit courses:

- Two or three 100-level courses
- Four or five courses above the 100-level.

The seven courses must include:

- At least one course focusing on the period before 1800
- At least one course in American history
- At least one course in European history
- At least one course in the history of Africa, Asia, or Latin America

With the permission of the department chair, transfer students and students with an exceptional secondary background in history may be allowed to substitute upper-level courses for the 100-level requirement.

Courses

In addition to the following history classes, many classics courses (p. 114) may be used to fulfill requirements of the history major or minor.

HIS 106 The Medieval World **3 Credits**
The development of a distinctive European civilization between 500 and 1500. Emphasis on Europe's contacts and conflicts with the 'competing' cultures of Byzantium and Islam. This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.

HIS 107 History of Modern Europe to 1815 **3 Credits**
The major political, economic, social and intellectual currents in Western Civilization from 1500 to 1815. This course may be used for the European history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: fall and/or spring.

HIS 108 History of Modern Europe since 1815 **3 Credits**
The major political, economic, social and intellectual currents in Western Civilization from 1815 to the present. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: fall and/or spring.

HIS 109 History of Asia to 1800 **3 Credits**
Comparative study of civilizations, cultures, religions and institutions of the Far East, and South Asia. This course may be used for the African/Asian/Latin American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: fall.

HIS 110 History of Asia Since 1800 **3 Credits**
The various independence and revolutionary movements and their evolution into the modern nation-states of Asia. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: spring.

HIS 111 Men and Ideas in History **3 Credits**
This course is a survey of the role of ideas in historical change in the period from the Renaissance to the nineteenth century. It will examine the political, religious, and social characteristics of western Europe. It emphasizes the importance of individuals since ideas are the products of human minds, and these individuals offer us an encounter with a variety of historical contexts in which the ideas of Western civilization have been shaped. In short, by studying the ideas which have shaped the Western tradition, we study history itself and not some abstract phenomena created in a vacuum.
Fulfills College Core: Field 4 (History)
Offered: occasionally.

HIS 123 History of the United States: The Colonial Period to Reconstruction **3 Credits**
Introduction to major themes of American history through the Civil War including: the Columbian Exchange and colonization, American Revolution, paradox of freedom and slavery, emergence of a market economy, secession and Reconstruction. This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Diversity, Field 4 (History)
Offered: fall and/or spring.

HIS 124 History of the United States: 1877 to the Present **3 Credits**
Industrialization and urbanization of the United States with the accompanying social, economic and political problems; America's emergence as a major power in world affairs. This course may be used for the American history requirement for the history major or minor.
Restriction: Not open to students taking or who have received credit for HIS 126.
Fulfills College Core: Diversity, Field 4 (History)
Offered: fall and/or spring.

HIS 126 America's Story II: The Later Years **3 Credits**
The American Story is a course in American history that covers the late 19th century into the late 20th century as the U.S. evolved into a major industrial and international power. This course satisfies the oral communication attribute. This course may be used for the American history requirement for the history major or minor.
Restriction: Not open to students taking or who have received credit for HIS 124.
Fulfills College Core: Diversity, Field 4 (History), Oral Communication
Offered: fall and/or spring.

HIS 131 Latin American History to 1830 **3 Credits**
Pre-Columbian Indian civilizations. Conquest and colonization. Economy, society, and the Church. Eighteenth century reforms and independence. This course may be used for the African/Asian/Latin American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: fall.

HIS 132 Latin American History since 1830 **3 Credits**
Overview of economy and society. Upheavals and revolutions in Argentina, Brazil, Colombia, Cuba, Chile and Mexico. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: spring.

HIS 201 United States Military History **3 Credits**
The course encompasses traditional U.S. military history; strategy, battles, technology. However, it also focuses on sociopolitical and justice issues of the U.S. armed forces. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Justice
Offered: occasionally.

HIS 203 Castles, Bones and Battleaxes: Material Culture of the Medieval World **3 Credits**
The class examines current trends in the study of medieval material culture and explores ways in which it can be shown to the public to illustrate the rich tapestry of the medieval world. This course may be used for the European history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: occasionally.

HIS 204 Soccer in Global History **3 Credits**
Course focuses on the global history of soccer. This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: occasionally.

HIS 211 Women In The Western World **3 Credits**
Comparative history of women in Europe, Britain and America from Renaissance to present. Deals with the changing role of women in society, politics and the economy and on the development of feminism as an intellectual and political force. This course may be used for the European or American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.

HIS 213 Twentieth Century Europe **3 Credits**
Major political, economic, social and intellectual currents in Europe since 1900. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: fall and/or spring.

HIS 220 The History of Food **3 Credits**
Explores the evolving role of food in western societies from the middle ages to the present. Topics will include the medieval fascination with spices, Europe's adoption of 'New World' foods like potatoes and tomatoes, the role of food shortages and rationing in wartime, and the recent emergence of a diverse international 'foodie culture.' This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.

HIS 226 History of Ireland **3 Credits**
Examines political, social and cultural developments from medieval origins through invasion, conquest, colonization and finally independence from Great Britain. Special emphasis on the development of Irish nationalism and on the emergence of Eire as a modern European state. This course may be used for the European history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.

HIS 229 The Violent Century in Films 3 Credits
The major events of the 20th century, including World Wars I and II, the Russian Revolution, the Great Depression, the rise of Fascism and the Vietnam War. This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: fall and/or spring.

HIS 230 The Holocaust in Historical Perspective 3 Credits
A historical survey of the Holocaust that places Nazi Germany's campaign to exterminate European Jewry during World War II (1939-45) in a broader historical context by tracing the history of anti-Semitism from its origins in late antiquity to the emergence of racial anti-Semitism in the nineteenth and twentieth centuries. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: fall and/or spring.

HIS 235 From Jamestown to Yorktown: Making the United States 3 Credits
Explores the political, economic, social, and cultural stories of North America from the era of pre-European contact through the settlement of the English colonies in the seventeenth and eighteenth centuries to the 'revolutions' of the late seventeenth century, including the period of the American Revolution. This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Diversity, Field 4 (History)
Offered: fall.

HIS 236 From Washington to Lincoln: The Making of American Democracy 3 Credits
Class focuses on the story of American history from the end of the Revolutionary War to the end of the American Civil War, especially examining political, economic, social, and cultural issues. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Diversity, Field 4 (History)
Offered: spring.

HIS 251 Sport in America 3 Credits
Investigates sporting endeavors from informal folk games to today's multi-billion dollar entertainment industry. Looks at the decline of amateurism, use of steroids, and practice of stadium welfare, as well as how America's sporting culture has shaped society and been influenced by industrialization, urbanization, and commercialization. This course may be used for the American history requirement for the history major or minor.
Prerequisite: None. **Corequisite:** None.
Fulfills College Core: Diversity, Field 4 (History)
Offered: occasionally.

HIS 255 African American History 3 Credits
This is an introductory course on African American history which receives credit for Area Studies IV and International & Cultural Diversity within the college's Core Curriculum. In largely chronological fashion, it covers a wide variety of topics, including the motherland of Africa, enslavement in British North America, emancipation, Jim Crow, and the varying strategies to achieve justice and equality, including black nationalism, Pan-Africanism, and the civil rights movement. Besides influential African Americans, attention is paid to cultural expression, the world of work, family structure, coping mechanisms, and political gains. The course's focus is less on how whites controlled African Americans than on black life, struggles, and creativity
Fulfills College Core: Diversity, Field 4 (History)
Offered: occasionally.

HIS 260 Canada and the World 3 Credits
A survey of Canada's place in world history from the colonial period to the present. Among the topics examined are Native-Canadians, the British-French rivalry for North America, Canada's emergence as a nation within the British Empire, Canada-U.S. relations and the modern multicultural Canadian state. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.

HIS 263 Wars of Latin America 3 Credits
Wars of independence and major conflicts of the nineteenth century. Military history of Mexican, Cuban and Nicaraguan revolutions. Border clashes and guerilla insurgencies of the twentieth century. Argentina's war with England. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: every other year.

HIS 280 The Making of Modern Africa 3 Credits
Development of modern Africa from the diverse societies of pre-colonial Africa through the impact of imperialism to an examination of the problems facing modern African states. This course may be used for the African/Asian/Latin American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: every other year.

HIS 299 Historian's Craft 3 Credits
These courses are designed to introduce students systematically to the analysis of historical texts, the standards of historical writing, and the methods of historical research while exploring specific topics of historical interest. Topics vary each semester; a course in this category will be offered each year. Recent topics have included the Civil Rights Movement Revisited, The History of Everyday Life, and Stalinism and Nazism.
Fulfills College Core: Advanced Writing-Intensive
Offered: fall and/or spring.

HIS 300 Historical Geography 3 Credits
Examines the interaction between the historical process and human, physical and cultural geography. Required for dual major in history and social studies education. This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Offered: every third semester.

HIS 302 Life and Theology in Colonial Atlantic 3 Credits
Investigates the story of the colonial Atlantic world through the life and experiences of one of America's founding fathers, such as the philosopher and theologian Jonathan Edwards, focusing on the early modern European context of which most colonists were heirs, the founding of the New England colonies in the 17th century. This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

HIS 306 American Religious Experience 3 Credits
Overview of major thoughts, movements and personalities of American Religious History from colonial era to the present. Catholicism used as a model, focusing on themes of immigration and Americanization as central to understanding religious landscape of the U.S. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

HIS 309 World War I **3 Credits**
A study of the origins, conduct and aftermath of the Great War from a global perspective. Emphasis on the diplomatic, social and military aspects of the War. This course may be used for the European history requirement for the history major or minor.
Offered: occasionally.

HIS 321 Russian History and Culture from Ivan the Terrible to Vladimir Putin **3 Credits**
This faculty-led seminar in Moscow and St. Petersburg will focus on Russian and Soviet history from the Muscovite period of the 1300s to the Putin era of today. In preparation, students will complete a series of readings giving a broad overview of Russian history and culture. During the trip, they will read brief texts for daily discussions on visits to historic landmarks, museums, cultural sites, and lectures from Russian scholars. Each evening students will gather in a group to discuss their impressions, the readings, and broader questions relating to the experiences of the day. Please contact the instructor ASAP about the fees associated with this course.
Offered: occasionally.

HIS 331 British Monarchy **3 Credits**
The history of Britain's monarchy from the end of the middle ages to the present. Emphasis on the transformation of the monarchy from the center of government in the sixteenth and seventeenth centuries to a largely symbolic, even vestigial constitutional mechanism in the twenty-first. This course may be used for the European history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Oral Communication
Offered: occasionally.

HIS 339 Nazi Germany, World War II and the Holocaust, 1933-45 **3 Credits**
An intensive study of the Third Reich from Hitler's appointment as chancellor in 1933 to the defeat of Nazi Germany in 1945. Course will focus on the political, diplomatic and military history of the Third Reich with special attention on the mass murder of European Jewry. This course may be used for the European history requirement for the history major or minor.
Offered: every other year.

HIS 342 The Global Cold War **3 Credits**
In 1946 Winston Churchill proclaimed that an 'Iron Curtain' had fallen across Europe, dividing the world into two hostile camps--the 'freedom loving West,' and the 'Totalitarian East.' This course examines the history of the Cold War from the Soviet-dominated side of the Iron Curtain, focusing on events such as the arms race, the Cuban Missile Crisis, and the war in Afghanistan. This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Offered: every other year.

HIS 345 Russia and the Soviet Union in the Twentieth Century **3 Credits**
This course examines the social, political, and cultural history of Russia and the Soviet Union in the twentieth century. Special emphasis will be placed on the causes and consequences of the 1917 revolutions, the development of Stalinism, the Cold War, and late Soviet society. Students will also explore the fall of Communism, the rise of the “mafia state” in the 1990s, and contemporary Russia under Vladimir Putin.
Offered: occasionally.

HIS 346 The Age of European Fascism, 1919-1945 **3 Credits**
A comparative analysis of fascist movements and regimes in Europe between the two world wars with particular attention devoted to fascist Italy and Nazi Germany. This course may be used for the European history requirement for the history major or minor.
Offered: every other year.

HIS 347 The History of Marxism **3 Credits**
History of Marxism as an intellectual tradition, with emphasis on writings of Marx and Lenin, from the nineteenth to the twentieth century. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Field 2 (Philosophy), Justice
Offered: every other year.

HIS 348 Twentieth Century Marxism **3 Credits**
Examines the history of Marxist thought from the beginning of the 20th century to the collapse of the Communist regimes in central and eastern Europe in the turmoil of the early 1990s. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Ethics, Field 2 (Philosophy)
Offered: every other year.

HIS 356 Modern China **3 Credits**
Examines the evolution of Chinese society from the imperial era, through the world wars, the Communist Revolution and the re-emergence of China as a major economic and political power. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Offered: occasionally.

HIS 358 Traditional Japan **3 Credits**
This course examines the roots of Japanese history and culture from ancient times. Among the topics studied are early Japanese religion and society, the court culture of the Heian era, Japanese feudalism and the transition to the modern world in the Tokugawa period. Development of modern Japan from Restoration of 1868 to the present. This course may be used for the African/Asian/Latin American history or pre-1800 period requirement for the history major or minor.
Offered: occasionally.

HIS 365 U.S.-Latin American Relations since 1898 **3 Credits**
U.S. occupations in the Caribbean and Central America. The Mexican Revolution. The CIA operations in Guatemala and Cuba. The Cold War in Latin America. The Nicaraguan Revolution and turmoil in Mexico. This course may be used for the American or African/Asian/Latin American history requirement for the history major or minor.

HIS 382 New York State History **3 Credits**
This course explores the history of New York State from its colonial origins through the twentieth century in the context of major themes in American history. Special attention paid to slavery, ante-bellum reform movements, New York City, progressivism, immigration. This course may be used for the American history requirement for the history major or minor.
Offered: every other year.

HIS 386 The Civil War Era **3 Credits**
Covers the events leading up to the War, including abolitionism and Bleeding Kansas. There will also be an in-depth examination of the military strategies and tactics of the War as well as the process of modernization that War engendered. The course will conclude with an analysis of the successes and failures of Reconstruction. This course may be used for the American history requirement for the history major or minor.
Offered: every other year.

HIS 387 Representations of the Holocaust in Film, Literature, Art and Music **3 Credits**

For many historians, the defining moment of the twentieth century is the Holocaust -- the systematic and deliberate extermination of an estimated ten to twelve million people, of whom six millions were Jews. This course explores representations of the holocaust in literature and film since the end of World War II. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Ethics, Field 3 (Literature and the Arts)
Offered: every other year.

HIS 394 Modern Middle East **3 Credits**

History of Middle East from the last days of the Ottoman Empire through mandate system established by Versailles Peace Conference to struggle for independence during and after World War II. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Offered: every other year.

HIS 396 Politics and Society in American Film **3 Credits**

This course explores the history of film, the quintessentially democratic art, in the United States with special attention to the origins of the moving pictures, Hollywood and its Golden Age, and the assault against the movies by the House Un-American Activities Committee. This course may be used for the American history requirement for the history major or minor.
Offered: occasionally.

HIS 401 Historical Methodology **3 Credits**

Methods of historical research and criticism, including consideration of basic bibliographical and reference works, note-taking, and evaluation of sources. Research paper required.
Prerequisite: HIS 299 **Restriction:** history honors students and others with permission of chair.
Offered: spring.

HIS 405 History Seminar: US National Security **3 Credits**

US foreign relations, military history and intelligence.
Prerequisites: HIS 299 or HIS 401
Offered: occasionally.

HIS 406 History Seminar: Soccer in Global History **3 Credits**

History of soccer in a global perspective.
Prerequisites: HIS 299 or HIS 401
Offered: occasionally.

HIS 408 History Seminar: Social Movements through Song **3 Credits**

Social Movements in US history as represented through music.
Offered: occasionally.

HIS 409 History Seminar: Race in Early America **3 Credits**

The issue of race in America from the early explorations to the 19th century.
Offered: occasionally.

HIS 410 Revolution and Violence in Russian History **3 Credits**

This course examines key moments in Russian and Soviet history in the nineteenth and twentieth centuries. Students will be exposed to the major historical debates surrounding the Russian revolutionary movement, anti-Semitic violence, the Russian Civil War, Collectivization, the Stalinist Terror and Gulag, WWII, issues pertaining to the Cold War, and other major events. The course will be centered around discussions of articles and books chosen to provide differing viewpoints on the topics listed above. Open to juniors and seniors only.
Offered: occasionally.

HIS 411 History Honors Thesis **3 Credits**

Research and writing of a thesis to satisfy requirements for graduation with Honors in History.
Prerequisite: permission of the instructor and/or the chair.
Fulfills College Core: Advanced Writing-Intensive
Offered: fall.

HIS 414 Black Lives Matter **3 Credits**

Ever since Africans were brought to North America in chains, they have protested their enslavement and, once freed 250 years later, protested racial oppression in order to claim their identity as unique, equal, and empowered members of American society. This new Core Capstone course will consider the plight of African Americans in different historical periods, two seemingly antithetical objectives of black protest (assimilation and nationalism), and different methods to improve their lot. Behind leaders, such as Henry Highland Garnet, Frederick Douglass, Ida B. Wells, W.E.B. Du Bois, Marcus Garvey, Jo Ann Gibson Robinson, Martin Luther King, Jr., James Farmer, Malcolm X, and Alicia Garza, African Americans have pressed for fundamental human rights. Their methods of protest have included petitions, speeches, conventions, editorials, boycotts, marches, demonstrations, riots, lobbying, and social media. Throughout the course, we will consider the actions of the Black Lives Matter movement that emerged in the wake of Trayvon Martin's killing by a self-appointed vigilante.
Fulfills College Core: Core Capstone
Offered: Occasional.

HIS 420 Food in Time and Place: Culture, Society, Power, and Politics **3 Credits**

Topics will include the influence of the "Columbian Exchange," the effects of industrialization, the impact of famine and food shortages, the development of nutritional science and dietary reform movements, and the recent emergence of both global and locavore"foodie cultures." By investigating how food supplies, food policies, and even individual diets have changed over time, we will examine relationships of power and class, the impact of trade and technology, and the process of economic and cultural globalization. The course will focus primarily on developments in Europe and the Americas, but discussion of trade and globalization will lead us to consider non-western traditions as well. As an upper-level seminar, this course is designed to introduce students to literature in the growing field of food history, and also to the nature of historical research. Consequently, Students will explore the topic through a variety of primary and secondary readings as well as images and (sometimes edible) artifacts, and will engage in their own research projects. Seminars normally open to seniors and juniors.
Prerequisite: HIS 299.
Offered: occasionally.

HIS 421 Nature and the Arts of Angling, Restoration, and Contemplation **3 Credits**

As an exercise in the genre of cultural history, this course is an introduction to the history, literary and cultural significance, and practice of fly fishing in America, as well as around the world. Students will also examine the religious themes and the 'spiritualization' often attached to fly fishing, which have been expressed in some of the most loved writings in the English language. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Core Capstone
Offered: once a year.

HIS 440 History Seminar: 20th century Genocide and Human Rights **3 Credits**

Focuses on world genocides in the 20th century.
Prerequisites: HIS 299 or HIS 401
Offered: occasionally.

HIS 450 America and the Holocaust **3 Credits**
Explores the response of the United States to the Holocaust, the systematic extermination of an estimated ten to twelve million people, of whom six million were Jews, during World War II. It examines the implications of the American response to the Holocaust for the inequities and prejudices that remained at the core of American life in the mid-twentieth century. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Core Capstone
Offered: occasionally.

HIS 460 The Life and Times of Theodore Roosevelt **3 Credits**
Arguably, Theodore Roosevelt ranks among the most widely quoted American presidents. His daughter Alice once remarked: "My father always wanted to be the corpse at every funeral, the bride at every wedding and the baby at every christening." This capstone will evaluate the trials and tribulations that TR faced during four decades of public service and his legacy to the modern world. As Roosevelt famously said in 1910 " It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena ... who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who neither know victory nor defeat." This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Core Capstone
Offered: once a year.

HIS 470 American Women in History and Literature **3 Credits**
From devilish corsets to the Devil wearing Prada, from separate spheres to glass ceilings, and from Settlement House Cookbooks to Julia Child, American women have had myriad experiences over the past centuries. This course will explore women's lives from various perspectives using the rich literature written by women of various backgrounds. Sources include fiction and non-fiction and include memoir, autobiography, political speeches, novels, shorts stories, and musical lyrics. Much of the literature reflects on how women have defined and redefined themselves as citizens and as individuals. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Core Capstone
Offered: occasionally.

HIS 487 Representations of the Holocaust in Film, Literature, Art and Music **3 Credits**
For many historians, the defining moment of the twentieth century is the Holocaust -- the systematic and deliberate extermination of an estimated ten to twelve million people, of whom six millions were Jews. This course explores representations of the holocaust in literature and film since the end of World War II. This course may be used for the European history requirement for the history major or minor. Students cannot take this course if they have taken HIS 387.
Fulfills College Core: Core Capstone

HIS 498 Internship **3 Credits**
Internships may be arranged with a variety of organizations including the Theodore Roosevelt Inaugural Site Foundation, the Buffalo and Erie County Historical Society, and the Coloured Musicians Club museum. Internships require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

HIS 499 Independent Study **3 Credits**
Offers the opportunity to conduct a program of independent readings and/ or research on a topic of the student's choice under the supervision of a member of the History Department. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Humanities (AA or BA)

The Humanities major includes those branches of learning that are concerned with human thought and experience in history, language and literature, philosophy, religious studies, fine arts and music. Its goal is to lead the student to appreciate those aspects of his or her own culture, as well as their relationship to the cultures of other times and places. Although the humanities major is not oriented toward a particular career, its emphasis on critical understanding and disciplined reflection prepares a student for later training in many fields of employment including law, government, journalism, teaching and human services.

Qualifications

Students must maintain an overall 2.0 cumulative average to graduate with a degree from Canisius.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students interested in pursuing this degree at either the Associate- or Bachelor-level should contact an Associate Dean in the College of Arts and Sciences.

AA Curriculum

The associate of arts degree in humanities program requires the completion of 60 credit hours of coursework. The program has two basic purposes:

1. It offers an immediate goal for students seeking a general introduction to the humanities (history, languages, literature, philosophy, religious studies, fine arts and music).
2. It provides a basic foundation for those who wish to go on for a bachelor's degree.

The program contains a second track designed for the prospective business major. Students who plan baccalaureate studies in the future are encouraged to choose the track that fits their individual goals. If a student remains at Canisius College, all of the coursework in the associate degree program is transferable and applicable to the bachelor's program.

Core Curriculum Requirements

All students complete Core Curriculum requirements as part of their overall Canisius Education. These requirements can be found on the Core Curriculum website (http://www.canisius.edu/academics/core/).

Major Course Requirements

Code	Title	Credits
Select one of the following tracks (6 courses):		
Humanities Track:		
	English: two 200 level courses	
	Religious Studies: two courses	
	Humanities: two courses, to be selected from Fine Arts, English, History, Modern Language, Music, Religious Studies, or Philosophy 300 level	
Business Track:		
	Art and Literature: two courses	
	Religious Studies: two courses	
	Business Electives: two courses	

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 60 credit hours for graduation with an Associates degree.

Other Associate's Degree Regulations

The basic residency requirements for AA degrees is 30 credit hours, at least 15 of which must be completed in traditional classroom situations. No more than 30 credits may be transferred from another institution. Not all courses at other institutions are applicable to the associate degree, and transfer students are required to have a transfer evaluation completed by the college registrar.

For more information contact the Dean in the College of Arts and Sciences.

BA Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
English: two 200 level courses plus two 300 - 400 level courses in a major literary genre		
History: two 300/400-level courses		
Philosophy: four 200/400-level courses		
Religious Studies: two 300/400-level courses		
Modern Language: two courses in Modern Language or Literature in Translation and/or Civilization		
Humanities: two courses to be selected from Fine Arts, History, Music, Religious Studies, Philosophy 300 level		
Concentration: Three additional 300/400-level courses in one of the following departments: Fine Arts, English, History, Modern Language, Religious Studies, Philosophy		

Integrated Marketing Communication (BS)

Program Directors: John S. Dahlberg, PhD and Gregory R. Wood, PhD

Introduction

The Marketing & Information Systems and Communication Studies departments have pooled their energies and experience to develop the Bachelor of Science degree in Integrated Marketing Communication. This interdisciplinary program will provide students with the skills and knowledge that are requisite to the success of every for profit and not for profit company and corporation: an integrated approach to marketing communication. It gives students a blend of coursework in advertising; communication; consumer behavior; marketing; media (including traditional ATL, BTL and digital and social]; promotions; public relations; social and digital media and marketing; research and sales. It will prepare graduates for careers in advertising, marketing, media (both traditional and online media), promotions, public relations, sales and a range of opportunities in reputation and community management (in social networks such as Facebook, Twitter, Instagram, Tumblr and more). It will prepare some for the application of these skills and tactics, while it prepares others for the strategic management of these functions. The corporate world sees these skills as overlapping and integrated. We have long advocated that it is proper to pedagogically deliver them in that way.

The value of this program comes in a relatively rare and novel approach to removing, heretofore, artificial barriers between schools of marketing and communication. All of the faculty, who will be involved, understand the interrelated nature of these various disciplines. Among the faculty who will teach in this program are individuals with considerable applied/practitioner experience in marketing communication. They understand the importance of collaboration between marketing professionals, consumer research specialists, communication professionals, media experts, creative consultants and more. This is the common experience of those in the industry. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Communications Studies website (https://www.canisius.edu/academics/programs/communication-studies/).

Qualifications

Majors must have a cumulative GPA of at least 2.0, a minimum grade of C- in all communication courses, and a minimum overall average of 2.0 in all major coursework. Performance of majors is subject to review relative to their continuation in the program.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Integrated Marketing Communication majors are assigned an advisor at the beginning of their freshman year. If you are a transfer into the Integrated Marketing Communication major or you do not have an advisor, please contact the Communication Studies departmental office at 716-888-2115 so that an advisor can be assigned.

Major Experiences

Internships

Internships (COM 488 , COM 498 , or MKT 496) awarding up to a maximum of 12 credit hours may be earned by qualified Integrated Marketing Communication Studies majors at approved locations in Buffalo or other cities. The internships are individually arranged, require department approval and are available only to junior or senior candidates with a cumulative GPA of at least 2.5 and an Integrated Marketing Communication average of at least 2.7. Students are encouraged to plan early to do internships during their junior and senior years. Interested majors should consult with their advisor or see the department chair for more information.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Students interested in declaring double majors within the Department of Communication (Communication Studies (p. 118), Digital Media Arts (p. 134), Integrated Marketing Communication (p. 180), or Journalism (p. 186)) will be allowed to share a maximum of 9 credits between the two majors. This requires 24 distinct credits for communication studies, 27 distinct credits for digital media arts, 36 distinct credits for integrated marketing communication, and 24 distinct credits for journalism. Additionally, for students with a double major outside the Department of Communication, students may double count up to 9 credit hours of electives between the two majors. Please note, however, that the second major may not necessarily allow double counting of credits. For more information, please contact the department chair.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
COM 211	Introduction to Integrated Marketing Communication	3
COM 311	Principles of Advertising	3
COM 312	Public Relations: Principles and Practices	3
MKT 201	Principles of Marketing	3
MKT 320	Consumer Behavior	3
DMA 201	Introduction to Digital Media	3
MKT 371	SpecTop in DM:Mkt Data Analyti	3
MKT 350	Digital Marketing	3
MKT 370	Special Topics in Digital Marketing and Social Media	3
MKT 397	Search Marketing: SEO & PPC	3
Select 4 of the following tactical Integrated Marketing Communication electives:		12
COM 315	Advertising and the Creative Process	
COM 320	Advertising Writing	
COM 330	Public Relations Writing	
COM 411	Advertising Campaigns	
COM 412	Public Relations Case Studies	
DMA 342	Introduction to Web Design	
DMA 393	Advertising Design	
COM 308	Social Media Effects	
COM 353	Advertising Account Strategies	
COM 488	Internship I Seminar	3-9
or COM 478	Capstone Project	
or MKT 496	Marketing Internship	
Total Credits		45-51

Roadmap

Freshman

Fall	Spring
COM 211	DMA 201
COM 312	MKT 201

Sophomore	
Fall	**Spring**
MKT 320	MKT 397
COM 311	MKT 350
Junior	
Fall	**Spring**
MKT 371	IMC Elective
MKT 370	IMC Elective
Senior	
Fall	**Spring**
IMC Elective	COM 478 (or internship)
	IMC Elective

Learning Goals & Objectives

The following learning goals and objectives apply to all Integrated Marketing Communication Studies majors.

Student Learning Goal 1

Students will demonstrate an understanding of the theory and application of principles of:

- **Objective A:** How the various functions of marketing, advertising, public relations, and media (both traditional and digital) interrelate.
- **Objective B:** How best practices of these functions can be selected and applied to help achieve marketing and marketing communication goals.
- **Objective C:** How to evaluate the success of those applications.

Student Learning Goal 2

Students will demonstrate an understanding of strategic planning for integrated marketing communication including:

- **Objective A:** how to conduct and interpret basic primary and secondary market research
- **Objective B:** how to manipulate and explain simple data analytics involved in the integrated marketing communication environment.
- **Objective C:** how to use research to develop/create a workable integrated marketing communication plan.

Student Learning Goal 3

Students will demonstrate an understanding of the tactical skills necessary to implement an integrated marketing communication plan including:

- **Objective A:** how to identify and understand a primary and secondary target market.
- **Objective B:** how to create messages, both visual and verbal, traditional and digital, that will effectively promote a brand to a target market.
- **Objective C:** how to evaluate the effectiveness of an integrated tactical plan.

International Relations (BA)

Director: Paola Fajardo-Heyward (fajardop@canisius.edu), PhD

Introduction

The International Relations program at Canisius College is a multidisciplinary program that is anchored in History, Modern Languages, and Political Science but also includes courses in international business, economics, religious studies, philosophy, and other academic disciplines. The goals of the program are to provide the International Relations major with a basic understanding of the issues, functions and theories of the international system and to cultivate skills in research, writing, critical thinking, analysis, and oral presentation that are necessary for success in a career in the fields of international affairs, international business, law, education, and academia. Students majoring in International Relations must also satisfy a requirement for an International Educational Experience. Each student's program is structured to maximize options after graduation. Completion of the major program will lead to a Bachelor of Arts degree in International Relations. For a more detailed description of the program, faculty, facilities, academic, and co-curricular opportunities please go to the International Relations website (https://www.canisius.edu/academics/programs/international-relations/).

Qualifications

The International Relations major and minor are open to any student who has completed PSC 140 (Introduction to International Relations) with a minimum grade of C. A minimum overall average of 2.00 in all courses taken to complete the major or the minor, and a minimum 2.0 cumulative GPA, is required for program completion.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Note: Advisement is the responsibility of the Director of the International Relations Program, who may share this responsibility with other members of the International Relations Advisory Council. All International Relations majors and minors are expected to consult with their advisor in the program at least once each semester.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Double majors have been developed between the International Relations Program and the Departments of History (p. 172); Modern Languages, Literatures, and Cultures (p. 198); and Political Science (p. 221) as well as with the programs in European Studies, (p. 154)Latin American Studies (p. 189), and International Business (p. 278). It is also possible to pursue a double major with other academic programs such as Communication Studies, Criminal Justice, Economics, and Sociology/Anthropology. For further information on double majors, contact the director of the International Relations Program. Students pursuing a dual major in

International Relations and another major may double count as many courses as possible toward the satisfaction of International Relations major requirements.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

All International Relations majors must take a core of nine courses in history, political science and economics, including an upper-level course in international business, and seven electives that have been approved by the International Relations Program Advisory Council for major credit. In addition, all International Relations majors must demonstrate proficiency in a modern foreign language through the Intermediate High level according to guidelines established by the American Council of Teachers of Foreign Languages, which at Canisius College typically requires successful completion of at least one 300-level foreign language course. All International Relations majors must also satisfy an international experience requirement that includes but is not limited to study abroad in a foreign university or an approved short-term program.

Code	Title	Credits
Select one of the following three regional history course groupings:		6
HIS 107 & HIS 108	History of Modern Europe to 1815 and History of Modern Europe since 1815 [1]	
HIS 109 & HIS 110	History of Asia to 1800 and History of Asia Since 1800	
HIS 131 & HIS 132	Latin American History to 1830 and Latin American History since 1830	
HIS 300	Historical Geography	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
PSC 245	American Foreign Policy	3
PSC 442	Seminar in International Relations	3
ECO 101	Principles of Macroeconomics	3
International Business Course at 300- or 400-level (approved courses are indicated by footnote in Major Electives below)		3
International Relations Electives - select 7 from the lists below (no more than 2 world culture electives)		21
Foreign Language Requirement (additional detail below) [2]		3-9
International Educational Experience (study abroad or alternative approved by the International Relations Director)		
Total Credits		51-57

1 Students may substitute HIS 213 or HIS 230 for HIS 108. If students use one of these courses to fulfill the general requirements for the major, the same course may not be used as a major elective course.

2 Students must complete at least one language course at the 300 level. The number of courses required depends upon the student's background when they enter Canisius.

Students must choose seven courses from the Major Electives and/or Approved World Culture Electives (only two of the seven may come from the World Culture Electives).

International Relations Electives

Code	Title	Credits
ECO 460	International Trade [1]	3
ENT 312	International Entrepreneurship [1]	3
FIN 460	International Finance [1]	3
HIS 213	Twentieth Century Europe	3
HIS 226	History of Ireland	3
HIS 229	The Violent Century in Films	3
HIS 230	The Holocaust in Historical Perspective	3
HIS 260	Canada and the World	3
HIS 263	Wars of Latin America	3
HIS 280	The Making of Modern Africa	3
HIS 309	World War I	3
HIS 339	Nazi Germany, World War II and the Holocaust, 1933-45	3
HIS 342	The Global Cold War	3
HIS 345	Russia and the Soviet Union in the Twentieth Century	3
HIS 346	The Age of European Fascism, 1919-1945	3
HIS 347	The History of Marxism	3
HIS 348	Twentieth Century Marxism	3
HIS 356	Modern China	3
HIS 365	U.S.-Latin American Relations since 1898	3
HIS 394	Modern Middle East	3
HIS 450	America and the Holocaust	3
HON 231	War & Peace since 9/11	3
HON 247	Islam: Religion, History, and Culture	3
IBUS 301	Fundamentals of International Business [1]	3
MGT 380	International Business Seminar [1]	3
MGT 440	Global Supply Chain Management [1]	3
MGT 472	Comparative Management Systems [1]	3
MGT 475	Doing Business in Latin America [1]	3
MKT 375	International Marketing [1]	3
MKT 478	Global Logistics [1]	3
PSC 241	Human Rights and Globalization	3

PSC 242	International Organizations	3
PSC 245	American Foreign Policy	3
PSC 250	Politics in Latin America	3
PSC 345	Transnational Crime After 9/11	3
PSC 355	European Union	3
PSC 360	Political Economy of the Developing World	3
PSC 370	Domestic Conflicts & Peace	3
PSC 452	Politics of Identity in Europe	3

[1] This course fulfills the International Business requirement.

World Culture Electives

International Relations Majors are encouraged to satisfy their Core Curriculum requirements in Fields 1, 2, and 3 by taking courses that provide a cultural dimension to the study of international relations. Under the current IR major curriculum students may take one or two of these courses — depending upon the particular track they may be following — as IR major electives. Courses offered by the Department of Modern Languages, Literatures, and Cultures (e.g., FRC, GER, SPA) require prerequisites and are generally taught in the language of study.

Code	Title	Credits
FRC 323	Cinema for French Conversation	3
FRC 417	The French and Francophone World at Work	3
FRC 427	Identities and Globalization	3
FRC 433	L'écriture de soi--The autobiography genre in French and Francophone Literature	3
FRC 453	War and Memory	3
FRC 454	Heritages Francophones	3
GER 472	Contemporary German Film	3
HIS 331	British Monarchy	3
HIS 358	Traditional Japan	3
HIS 387	Representations of the Holocaust in Film, Literature, Art and Music	3
HON 247	Islam: Religion, History, and Culture	3
HON 248	Religions of the East	3
HON 357	Global Pentecostalism	3
PHI 271	Philosophy of Human Rights	3
PHI 286	Latin American Philosophy	3
RST 220	Introduction to Eastern Religions	3
RST 224	Islam: Tradition and Revival	3
RST 327	Modern Global Christianity	3
SPA 336	Latin@s in the US: Latino Literature and Film	3
SPA 350	Spanish for Business	3
SPA 405	Spanish Literary Myths	3
SPA 406	History & Politics in Cuba	3
SPA 420	Personal Narrative: Understanding Reality and the Self in Contemporary Spanish Narrative.	3
SPA 453	Almodóvar and La Movida: The Films of Pedro Almodóvar	3
SPA 455	Spanish Short Fiction	3
SPA 456	Cuban Cinema of the Revolution	3
SPA 459	The Body Erotic/The Body Politic: Sexuality as Political Discourse in Latin America and Spain	3
SPA 460	Lorca and his Époque	3

Foreign Language Requirement

The modern foreign language requirement in the International Relations major is not a course but a proficiency requirement that at Canisius is normally satisfied by successfully completing ML 215-216/217 plus at least one course at the 300 level or above. If students are not placed at the 215-216/217 level when they enroll at Canisius, it will take them two extra semesters in the foreign language to meet this requirement. In other cases students may already have taken the equivalent of these courses in high school and therefore do not have to take them at Canisius but should continue their language preparation with a 300-level course in the language they have studied in high school. Students who study abroad in a country where the spoken language is a language other than English and take courses in that language as part of their study abroad experience may use this to satisfy the modern language requirement in the International Relations major.

International Educational Experience

All students majoring in International Relations must satisfy a requirement for International Education Experience. The most popular, but by no means the only way in which this requirement is satisfied, is by studying abroad. The International Relations Program strongly encourages its majors to fulfill the international experience requirement by spending at least one semester abroad studying at a foreign university. The Director of the International Relations Program works closely with the Director of Study Abroad at Canisius College to set up and monitor study abroad programs for Canisius students at a wide range of universities throughout the world. A complete list of sites with current articulations is available at the Study Abroad website (https://www.canisius.edu/study-abroad-locations-1/). Students may also study at an accredited university abroad other than those with articulations. Students doing this have recently studied at universities in Egypt, Jordan, Poland, and Senegal. Students who spend a semester abroad at a foreign university may count up to three courses as International Relations major electives as long as these courses have been pre-approved by the director of the International Relations Program. Students who spend a year studying at a foreign university may be able to count more than three courses as International Relations major electives, but this will require special permission from the director of the International Relations Program. As a general rule, students must complete the International Relations Core of nine courses at Canisius College. Exceptions to this rule may be approved by the International Relations Program Advisory Council.

Under some circumstances a short-term study abroad experience may be desirable. Recent examples of opportunities available include programs in Argentina, Canada (Québéc), Costa Rica, Cuba, France, Puerto Rico, and Spain, among others. Majors interested in these experiences should inquire with the Department of Modern Languages, Literatures, and Cultures (or other sponsoring programs) for more information. Students also may inquire with the Study Abroad Office for summer programs at The Catholic University of Lille, France; IÉSEG, Paris, France; the Berlin School of Economics and Law, the Catholic University of Eichstaett, and the Technical University of Dortmund in Germany; the National University of Ireland, Galway; Lorenzo de' Medici in Florence and Rome, Italy; the Universidad de Oviedo and the Universidad Pontificia Comillas in Spain; and the Sacred Heart University in Puerto Rico.

All International Relations majors and minors planning international educational experiences, whether short-term or traditional Study Abroad, must consult in advance with the Study Abroad office, the Director of the International Relations Program, the Chair or Director of all relevant academic programs, and the student's Associate/Assistant Dean to discuss whether courses completed abroad may satisfy academic requirements at Canisius College. Language credit may be awarded but this requires prior

approval from the Department of Modern Languages, Literatures, and Cultures.

Additional Course Considerations

Within the International Relations major a student may pursue one of four distinct tracks in International Business, International History, International Politics, and Language and World Culture. A student may also opt to pursue none of these tracks but fulfill the program major requirements listed above without concentrating in any particular area of the program. If a student chooses to pursue one of these four tracks, this will affect his or her choice of major electives. A student pursuing one of these tracks would still be required to take a modern foreign language through the Intermediate High level (including at least one 300-level course in that language) and to satisfy the international experience requirement. For further information, contact the director of the International Relations Program. For further information on each of these tracks, please go to the International Relations website (https://www.canisius.edu/academics/programs/international-relations/).

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
PSC 140	PSC 150
Select one of the following:	Select one of the following:
HIS 107	HIS 108
HIS 109	HIS 110
HIS 131	HIS 132
Modern Language at appropriate level	Modern Language at appropriate level
ECO 101	
Sophomore	
Fall	**Spring**
PHI 101	IR Major Elective
Modern Language 300-level	IR Major Elective
PSC 245	
IR Major Elective	
Junior	
Fall	**Spring**
HIS 300	Study abroad in location where language of study is commonly spoken
IR Major Elective	
IR Major Elective or 300-400 level Business	
Senior	
Fall	**Spring**
	IR Major Elective
	PSC 442

Learning Goals & Objectives

Student Learning Goal 1

International Relations Majors will demonstrate a basic knowledge of the components and dynamics of the international system.

Students will:

- Objective A: Demonstrate an understanding of the issues, functions, and theories of the international system;
- Objective B: Demonstrate an understanding of the role of history in international affairs;
- Objective C: Demonstrate an understanding of the role of geography in international affairs;
- Objective D: Demonstrate an understanding of the similarities and differences in political systems and economies;
- Objective E: Demonstrate an understanding of the role of the United States in the international system.

Student Learning Goal 2

International Relations majors will develop competence in the skills that are appropriate to the discipline and that are necessary for success.

Students will:

- Objective A: Demonstrate competence in the techniques of scholarly research in the field of International Relations;
- Objective B: Demonstrate competence in the techniques of scholarly writing in the field of International Relations;
- Objective C: Demonstrate competence at the ACTFL intermediate-high level in the use of a modern foreign language;
- Objective D: Be able to analyze an international problem or issue in a manner that demonstrates global or regional understanding and sensitivity to cultural difference.

Minor

A minor in International Relations consists of nine courses, of which two may be used to satisfy requirements in Fields 4 and 5 of the Canisius College core curriculum.

International Relations Minor Curriculum

Code	Title	Credits
Select one of the following three regional history course groupings:		6
HIS 107 & HIS 108	History of Modern Europe to 1815 and History of Modern Europe since 1815 [1]	
HIS 109 & HIS 110	History of Asia to 1800 and History of Asia Since 1800	
HIS 131 & HIS 132	Latin American History to 1830 and Latin American History since 1830	
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
HIS 300	Historical Geography	3
International Business Course at 300- or 400-level (approved courses are indicated by footnote in International Relations Electives on the curriculum tab)		3
Foreign Language Requirement [2]		3-6

International Relations Electives - select 3 from the list on the curriculum tab	9
Total Credits	30-33

1 Students may substitute HIS 213 or HIS 230 for HIS 108. If students use one of these courses to fulfill the general requirements for the minor, the same course may not be used as an elective course.

2 A student pursuing a minor in International Relations must demonstrate intermediate competence in a modern foreign language. Generally this proficiency is fulfilled by successful completion of a modern language through the 215 level.

Journalism (BS)

Director: Barbara J. Irwin, PhD

Introduction

The Department of Communication's major in journalism integrates deep, socially responsible reporting and writing with appropriate digital media. Students seeking a Bachelor of Science degree in journalism tell true stories across print, broadcast, online and mobile platforms. In keeping with the trend toward media convergence, they think visually, use social media to report and promote stories and design multimedia publications.

For additional information about the major visit the Journalism website (https://www.canisius.edu/academics/programs/journalism/).

Qualifications

Journalism majors must have a cumulative GPA of at least 2.0, a minimum grade of C- in all required journalism courses, and a minimum overall average of 2.0 in all journalism coursework. The performance of all majors is subject to review relative to their continuance in the program. Journalism majors need at least 36 hours of journalism courses (or 33 hours for double majors).

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

A journalism major is assigned an advisor at the beginning of the freshman year. Those who transfer into the journalism major should contact the Communication office at 888-2115 to be assigned an advisor.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Students interested in declaring double majors within the Department of Communication (Communication Studies (p. 118), Digital Media Arts (p. 134), Integrated Marketing Communication (p. 180), or Journalism (p. 186)) will be allowed to share a maximum of 9 credits between the two majors. This requires 24 distinct credits for communication studies, 27 distinct credits for digital media arts, 36 distinct credits for integrated marketing communication, and 24 distinct credits for journalism. Additionally, for students with a double major outside the Department of Communication, students may double count up to 9 credit hours of electives between the two majors. Please note, however, that the second major may not necessarily allow double counting of credits. For more information, please contact the department chair.

Journalism students who are double majors and successfully complete 3 or more credit hours in Internships (JRN 488 or JRN 498) are required to complete 30 hours of in-class credit in order to complete the journalism major. Otherwise, students complete a minimum of 33 credit hours of journalism courses. Students may wish to consider developing a foreign language competency, as well as a specialty in a field such as political science, economics, science, or religion.

Each journalism major and double major is assigned a department faculty advisor to plan an individual program that will satisfy the department's requirements and the student's personal goals. Course selections develop from the journalism requirements, prerequisites and electives.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
JRN 100	Introduction to Journalism	3
JRN 200	Multimedia Storytelling	3
COM 203	Writing for the Public Media	3
JRN 301	Newsgathering and Reporting	3
JRN 310	Journalism	3
COM 351	Media Ethics	3
or DMA 216	Digital Media Law	
JRN 490	Senior Project and Portfolio	3
Upper-level Concentration Courses (5 courses)		15
Total Credits		36

Upper-Level Concentration Courses

Journalism majors will select an area of concentration, also open to other majors who may be interested. There are three options for the concentration, each of which requires a total of five courses for 15 credit hours:

Sports Journalism and Broadcasting

Code	Title	Credits
Required Courses		
JRN 336	Sports Journalism	3
JRN 358	Sports Field Production I	3
JRN 359	Sports Field Production II	3
Concentration Electives		
Sports Communication – Select one of the following:		3
COM 359	Communication and Sports	
SPMT 412	Sport Marketing	
SPMT 430	Sport Communications	
Sports Broadcast and Journalism – Select one of the following:		3
JRN 201	Advanced Multimedia Storytelling	
JRN 311	Advanced Journalism and Investigative Reporting	
JRN 322	Feature/Magazine Writing	
COM 361	Introduction to TV Production	
or JRN 369	Television Features	
COM 367	Broadcasting in America	
Total Credits		15

Narrative Journalism

Code	Title	Credits
Required Courses		
JRN 311	Advanced Journalism and Investigative Reporting	3
JRN 322	Feature/Magazine Writing	3
JRN 342	Narrative Journalism	3
Concentration Electives		
Select two of the following:		6
JRN 201	Advanced Multimedia Storytelling	
JRN 336	Sports Journalism	
JRN 369	Television Features	
COM 374	Film History	
ENG 294	Introduction to Creative Writing	
ENG 393	Advanced Creative Writing: Memoir & Nonfiction	
Total Credits		15

Multimedia Journalism

Code	Title	Credits
Required Courses		
JRN 201	Advanced Multimedia Storytelling	3
COM 361	Introduction to TV Production	3
or JRN 369	Television Features	
CSC 108	Introduction to Web Computing	3
or DMA 342	Introduction to Web Design	
Concentration Electives		
Select two of the following: must be different from required courses taken		6
JRN 311	Advanced Journalism and Investigative Reporting	
JRN 322	Feature/Magazine Writing	
JRN 369	Television Features	
or COM 361	Introduction to TV Production	
COM 367	Broadcasting in America	
DMA 212	2D Graphics	
DMA 218	Motion Graphics	
Total Credits		15

Internships

Internships (JRN 488, JRN 498), awarding up to a maximum of 12 credit hours, may be earned by qualified journalism majors at approved locations in Buffalo or elsewhere. The internships are individually arranged, require department approval and are available only to junior or senior candidates with a cumulative GPA of at least 2.5 and a journalism average of at least 2.7. Internships are taken on a pass/fail basis and are counted toward free elective credit. Students are encouraged to plan early to do an internship during their junior or senior year.

Note: To gain valuable experience, journalism majors are advised to participate in clubs such as the student newspaper, television station, radio station, and digital media arts clubs.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
JRN 100	JRN 301
JRN 200	COM 203
Sophomore	
Fall	**Spring**
JRN 310	COM 351 or DMA 216
Junior	
Fall	**Spring**
Concentration requirement or elective	Concentration requirement or elective
Concentration requirement or elective	Concentration requirement or elective

Senior	
Fall	**Spring**
Concentration requirement or elective	JRN 490

Learning Goals & Objectives

These learning Goals and Objectives apply to all Journalism majors.

Student Learning Goal 1

Majors will understand the history and current state of the profession of journalism.

Students will:

- **Objective A**: Demonstrate a knowledge and understanding of Journalism's professional qualities and ethical standards, including the need to report facts fairly and accurately.
- **Objective B**: Demonstrate a knowledge and understanding of media law, the First Amendment, Sunshine Laws, and FOIA.

Student Learning Goal 2

Majors will think critically and creatively.

Students will:

- **Objective A**: Understand the nature of current and upcoming events in order to report meaningful news stories.
- **Objective B**: Exercise sound, responsible news judgment even under pressures of immediacy and competition.

Student Learning Goal 3

Majors will write for audience, platform, and message.

Students will:

- **Objective A**: Demonstrate the ability to write lively prose that adheres to the principles of objective news: transparently-sourced claims that are free from the writer's personal opinion.
- **Objective B**: Demonstrate the ability to write cogently in a structure appropriate for the chosen platform.
- **Objective C**: Demonstrate the ability to produce accurate stories based on facts that they have gathered, verified, analyzed and interpreted, using multiple sources and methods.

Courses

JRN 100 Introduction to Journalism **3 Credits**
Introduces the history and development of journalism, its norms and best practices. Examines theories of justice, and how they apply to and affect the pursuit of journalism since this country's founding. The course looks at how the institution of American journalism has both promoted justice, and at times allowed injustice to persist, through case studies, readings, and viewings of short documentaries.
Fulfills College Core: Justice
Offered: every fall.

JRN 200 Multimedia Storytelling **3 Credits**
Introduces the fundamentals of digital systems and technologies as they apply to journalism. Through class lecture and hands-on approaches, students will learn software and hardware used for journalistic applications of web design, multimedia, video production, graphics and audio production.
Offered: spring.

JRN 201 Advanced Multimedia Storytelling **3 Credits**
Students will explore multimedia storytelling through class lecture and hands-on experience of the digital systems and technologies used in journalism. The student will develop a better understanding of the nature of multimedia journalism using audio, video, graphics, animation and writing to tell news stories.
Prerequisite: minimum grade of C- in JRN 200 or permission of instructor.
Offered: fall.

JRN 301 Newsgathering and Reporting **3 Credits**
Grounded in the social responsibility theory of the press, this course covers both traditional methods (e.g., observing, interviewing, listening) and newer methods (e.g., Twitter, Facebook, crowd sourcing) to gather and verify material for news and feature stories, to be distributed via print, broadcast, web and mobile media.
Offered: spring.

JRN 308 Pre & Post Production **3 Credits**
Students will develop and hone skills in planning video projects -- features and promotion, for example -- completed before a live broadcase, as well as preparing highlights, video recaps, websites and social media postings during a live broadcast. The course will center on sports broadcasts, to air as part of the college's partnership with ESPN.

JRN 309 Sports Broadcasting **3 Credits**
Sports Broadcasting centers on the skills needed for play-by-play announcing in all sports, along with broadcast anchoring and reporting.
Offered: spring of even-numbered years.

JRN 310 Journalism **3 Credits**
Focuses on writing news and features for print and on- line media, using a variety of storytelling designs (e.g., the narrative, the inverted pyramid, the focus approach) combined with a variety of multimedia presentation methods (e.g., video, audio, slideshows).
Prerequisite: minimum grade of C- in JRN 100 and JRN 301 or permission of instructor.
Offered: fall.

JRN 311 Advanced Journalism and Investigative Reporting **3 Credits**
Advanced study and practice of all aspects of journalism, including news gathering, reporting, writing and editing.
Prerequisite: A grade of C- or better in JRN 200 and COM 203.
Offered: occasionally.

JRN 322 Feature/Magazine Writing **3 Credits**
Profiles and other human-interest features developed for newspapers, magazines, broadcast. Freelance writing is introduced.
Offered: every other year.

JRN 336 Sports Journalism **3 Credits**
Instruction on covering sports in the 21st century, including exposure to cross-platform journalism and the influence of social media. Students will learn practices and theories commonly encountered in locker rooms and press boxes from those in the business. Also counts as a COM elective.
Offered: spring.

JRN 342 Narrative Journalism **3 Credits**
The advanced study and practice of long-form, literary-influenced journalism, from magazines and nonfiction books to cross-platform, online media outlets. Students explore methods of conceptualizing, reporting, researching and writing long-form journalism while working on a literary nonfiction project of their own. prereqs or permission of instructor.

JRN 358 Sports Field Production I **3 Credits**
The principles and techniques of shooting, writing, directing and producing live broadcast events. Students in this course will be responsible for production of live basketball, hockey and other Canisius sports events aired over ESPN3 and ESPNU, as well as for other campus events as needed.
Offered: fall & spring.

JRN 359 Sports Field Production II **3 Credits**
Advanced principles and techniques of shooting, writing, directing and producing live broadcast events. Students in this course will be responsible for production of live basketball, hockey and other Canisius sports events aired over ESPN3 and ESPNU, as well as for other campus events as needed.
Offered: spring.

JRN 369 Television Features **3 Credits**
Design, write and produce special feature reports, multiple-part series, investigative stories and mini-documentaries. Emphasis on field work.
Offered: every other year.

JRN 380 Special Topics in Journalism **3 Credits**
Course focus will vary and is designed to provide in-depth study of journalism as it applies to specialized topics and content area that may include legal, business, health and science, environment, international and/or investigative journalism.
Offered: occasionally.

JRN 488 Internship I Seminar **3-9 Credits**
Student experientially learns journalism functions in compatibly matched professional setting, locally or out-of- town. Faculty and on-site supervision. Seminar required. Pass/fail. May be repeated as JRN 498; 12-credit limit for JRN 488 and JRN 498 combined. Information about the internship application process is available on the Journalism Program website.
Restriction: must be JRN major, junior or senior standing, minimum overall GPA of 2.50, minimum journalism average of 2.70, & approval by department faculty.
Offered: every semester.

JRN 490 Senior Project and Portfolio **3 Credits**
Culminating experience for Journalism majors in which they synthesize what they have learned in their program of study. Students work independently to create an online journalism portfolio, with an emphasis on the work that aligns with their chosen concentration.
Prerequisites: min grade of C- in JRN 100, 200, 310 and COM 203.
Offered: every spring.

JRN 491 Video Institute I **1-3 Credits**
Students produce significant projects in video, film, and television. See Dr. Irwin or Professor O'Neil for additional information.
Offered: occasionally.

JRN 498 Internship II Seminar **3-9 Credits**
Sequel to JRN 488 for students taking multiple internships. Each student is limited to a combined total of 12 credit hours for JRN 488 and JRN 498.
Restriction: JRN major with junior or senior standing, minimum overall GPA of 2.50, minimum communication studies average of 2.70, & approval by department faculty.
Offered: every semester.

JRN 499 Independent Study **3 Credits**
Student conducts original project or self-designed course of study under the tutelage of a Journalism faculty member. Offered only in very specific circumstances. Independent studies require an application and approval by the associate dean.
Prerequisite: junior or senior standing; & permission of instructor, chair, & associate dean. **Restriction:** must be JRN major.

Latin American Studies Minor

Minor

General Requirement

Code	Title	Credits
Spanish Proficiency demonstrated with a C or higher in SPA 217 (or a 300- or 400-level SPA course)		
Social Science and History - select 3 courses (students must take courses from two different departments/disciplines)		9
PSC 150	Comparative Government and Politics	
PSC 241	Human Rights and Globalization	
PSC 250	Politics in Latin America	
PSC 360	Political Economy of the Developing World	
PSC 370	Domestic Conflicts & Peace	
HIS 131	Latin American History to 1830	
HIS 132	Latin American History since 1830	
HIS 263	Wars of Latin America	
HIS 365	U.S.-Latin American Relations since 1898	
HON 223	Religion, Politics, & the Presidency	
IGSR 302	Jesuits in Argentina	
MGT 475	Doing Business in Latin America	
Language, Literature, and Culture - select 3 courses (students must take courses from two different departments/disciplines)		9
PORT 103	Intro Brazilian Portuguese I	
SPA 217	Introduction to Spanish Composition	
Any SPA course at 300- or 400-level		
FAH 103	Survey of Pre-Columbian and Native American Art	
FAM 123	World Musics	
FAM 224	Afro-Centric Music	
HON 381	Contemporary Literary Movements	
IGSR 302	Jesuits in Argentina	
PHI 286	Latin American Philosophy	

Learning Goals & Objectives

Student Learning Goal 1

Latin American Studies minor allows students to think critically about Latin American societies, governments, and policies through both historical and contemporary lenses.
Students will:

- **Objective A:** Interpret important political concepts, theories, events, actors, and processes pertinent to Latin American analyses;
- **Objective B:** Apply knowledge of Latin American history and diverse cultures to contemporary social and political themes;
- **Objective C:** Identify regional political, social, and economic trends and the impact of colonialism, globalization, and U.S. foreign policy towards Latin America.

Student Learning Goal 2

Latin American Studies minor curriculum uses research to articulate ideas and arguments clearly and effectively in the field of Latin American Studies.
Students will:

- **Objective A:** Integrate knowledge from different academic disciplines into a coherent paper, presentation or project that addresses a topic in Latin American Studies;

- **Objective B:** Conduct independent research and follow appropriate formats in documenting resources;
- **Objective C:** Communicate information, ideas, and research results effectively.

Student Learning Goal 3

Latin American Studies minor provides students with the skills to communicate in a modern language that is appropriate to the area of studies and necessary for professional success.

Students will:

- **Objective A:** Display competency of a Latin American language at the American Council on the Teaching of Foreign Languages (ACTFL) intermediate level.

Mathematics (BA)

Chair: Byung-Jay Kahng, PhD

Introduction

The Department of Mathematics and Statistics strives to transmit an understanding and appreciation of mathematics: its substance, its applicability, its literature, its current directions and problems, its historical development, its human worth and values; and to promote the development of skill in the practice of mathematics. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Mathematics and Statistics website (https://www.canisius.edu/academics/programs/mathematics/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Mathematics and Statistics. Students must have a minimum grade of C- in all courses in the major.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Popular double majors with mathematics are economics, computer science, education, and physics, but we have also had students double major in math and music, English, political science, philosophy, Spanish, psychology, pre-medicine, and other fields.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Option A (Mathematics Major)

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3
or MAT 351	Probability & Statistics I	
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 321	Real Analysis	4
MAT 380	Mathematics Seminar	1
MAT 381	Mathematics Seminar	1
MAT 480	Mathematics Seminar	1
Select one of the following:		3
MAT 312	Topics in Algebra	
MAT 322	Topics in Analysis	
MAT 352	Probability & Statistics II	
MAT 421	Complex Analysis	
Select four courses from the following:		12-16
Any additional 300 or 400-level mathematics courses		
PHY 335	Mathematical Analysis for Physicists	

PHY 446	Quantum Mechanics I	
Choose one of the following two sequences:		6-8
General Physics for Physical Science Majors (PHY 223, PHY 223L, Phy 224, and PHY 224L)		
Any two Economics (ECO) classes		
Total Credits		55-61

Option B (Mathematics with a Concentration in Another Area)

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3
or MAT 351	Probability & Statistics I	
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 321	Real Analysis	4
MAT 380	Mathematics Seminar	1
MAT 381	Mathematics Seminar	1
MAT 480	Mathematics Seminar	1
Select one of the following:		3
MAT 312	Topics in Algebra	
MAT 322	Topics in Analysis	
MAT 352	Probability & Statistics II	
MAT 421	Complex Analysis	
Select two of the following:		6-8
any additional 300 or 400-level mathematics courses		
PHY 335	Mathematical Analysis for Physicists	
PHY 446	Quantum Mechanics I	
Choose one of the following two sequences:		6-8
General Physics for Physical Science Majors (PHY 223, PHY 223L, Phy 224, and PHY 224L)		
Any two Economics (ECO) classes		
Four courses in another area approved by the Department of Mathematics and Statistics		12
Total Credits		61-65

Option C (Statistics)

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations (or 300 or 400-level mathematics course)	3
MAT 230	Logic, Set Theory, and Proofs	4
MAT 321	Real Analysis	4
Select one of the following		3-4
MAT 311	Abstract Algebra	
MAT 322	Topics in Analysis	
MAT 421	Complex Analysis	
MAT 351	Probability & Statistics I	3
MAT 352	Probability & Statistics II	3
MAT 353	Regression Analysis	3
MAT 354	Experimental Design and Statistical Computing	3
MAT 380	Mathematics Seminar	1
MAT 381	Mathematics Seminar	1
MAT 480	Mathematics Seminar	1
Select one additional upper-level MAT elective		3-4
Choose one of the following two sequences:		6-8
General Physics for Physical Science Majors (PHY 223, PHY 223L, Phy 224, and PHY 224L)		
Any two Economics (ECO) classes		
Total Credits		54-58

Additional Course Considerations

Option A is designed to prepare the student for positions in which mathematical competence is sought, as well as for advanced study in graduate school.

Option B allows the student to develop expertise in another area besides mathematics. Many students combine this option with a major or minor in another department. Students interested in education can get a dual major to give them a strong background in mathematics while fulfilling the requirements of the School of Education.

Option C prepares the student for advanced work or graduate study and the many careers which utilize statistical thinking. This option, together with appropriate courses in business, constitutes a good preparation for a career in actuarial science.

Roadmap

Recommended Semester Schedule for Major Courses

Option A

Freshman

Fall	Spring
MAT 111	MAT 112
PHY 223 (or ECO course)	PHY 224 (or ECO course)

Sophomore

Fall	Spring
MAT 211	MAT 219
MAT 230	MAT 222 or 351

Junior

Fall	Spring
MAT 311	MAT 381
MAT 321	MAT elective
MAT 380	

Senior

Fall	Spring
MAT 480	Select one of the following ("restricted elective"):
MAT elective	MAT 312
MAT elective	MAT 322
	MAT 352 (MAT352 is typically offered in the fall semester.)

	MAT 421
	MAT elective

Option B

Freshman

Fall	Spring
MAT 111	MAT 112
PHY 223 (or ECO course)	PHY 224 (or ECO course)

Sophomore

Fall	Spring
MAT 211	MAT 219
MAT 230	MAT 222 or 351

Junior

Fall	Spring
MAT 311	MAT 381
MAT 321	MAT elective
MAT 380	

Senior

Fall	Spring
MAT 480	Select one of the following ("restricted elective"):
MAT elective	MAT 312
	MAT 322
	MAT 352 (MAT352 is typically offered in the fall semester.)
	MAT 421

Option C

Freshman

Fall	Spring
MAT 111	MAT 112
PHY 223 (or ECO course)	PHY 224 (or ECO course)

Sophomore

Fall	Spring
MAT 211	MAT 219
MAT 230	MAT 351

Junior

Fall	Spring
MAT 321	MAT 381
MAT 352	Select one of the following statistics electives:
MAT 380	MAT 353
	MAT 354
	MAT 222 (or MAT elective)

Senior

Fall	Spring
MAT 480	Select one of the following statistics electives:
MAT elective	MAT 353
	MAT 354
	Select one of the following ("restricted elective"):
	MAT 311 (MAT311 is typically offered in the fall semester.)
	MAT 322
	MAT 421

Learning Goals & Objectives

Student Learning Goal 1:

Mathematics majors will perform tasks requiring logical reasoning.

Students will:

- **Objective A:** Understand the different types of mathematical statements and how they are used, including definitions, axioms, hypotheses, conclusions, theorems, corollaries, lemmata, and conjectures;
- **Objective B:** Understand methods of proof.

Student Learning Goal 2

Mathematics majors will know the content of the fundamental fields of mathematics and can perform tasks requiring complex reasoning.

Students will:

- **Objective A**: Use basic skills to manipulate expressions;
- **Objective B**: Know the basic definitions and theorems of mathematics;
- **Objective C**: Be able to perform tasks requiring complex reasoning.

Student Learning Goal 3

Mathematics majors will advance their understanding and knowledge of mathematics and their ability to convey mathematical concepts through currently available technology.

Students will:

- **Objective A** (Information Literacy): Use the internet and/or library resources to obtain relevant information concerning historical information or mathematical content in regards to current course or project. Students will be expected to both look up sources and learn to search for their own sources;
- **Objective B** (Computation): Use computers or graphing calculators to perform labor-intensive calculations and/or create graphical displays. Programs include, but are not limited to, *Excel*, *Minitab* (or other statistical software), *and Mathematica* (or other software);
- **Objective C** (Presentation): Use technology for the purpose of elegantly presenting mathematical ideas, theories or results. Technologies include PowerPoint, Prezzi, Jing, Beamer, Latex, Word, and graphical tools.

Student Learning Goal 4

Mathematics majors will communicate mathematical ideas with precision and clarity.

Students will:

- **Objective A:** Present mathematical material in writing;
- **Objective B:** Present mathematical material orally.

Minor

Mathematics Minor

(7 courses)

Code	Title	Credits
Required Courses		
MAT 111	Calculus I	4
or MAT 115	Calculus for Business	
MAT 112	Calculus II	4

MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 230	Logic, Set Theory, and Proofs	4
Restricted Electives		
Select one of the following tracks and take two of the courses in that track:		6-8
Probability and Statistics:		
MAT 351	Probability & Statistics I	
MAT 352	Probability & Statistics II	
Applied Mathematics:		
MAT 222	Differential Equations	
MAT 341	Numerical Analysis	
MAT 342	Graph Theory	
MAT 345	Climate and Sustainability	
PHY 335	Mathematical Analysis for Physicists	
Theoretical Mathematics:		
MAT 311	Abstract Algebra	
MAT 312	Topics in Algebra	
MAT 321	Real Analysis	
MAT 322	Topics in Analysis	
MAT 421	Complex Analysis	
Mathematics and Culture:		
MAT 301	History of Mathematics	
MAT 331	Geometry	
Total Credits		26-28

Courses

MAT 105 Finite Mathematics **3 Credits**
Introduction to finite (non-calculus) mathematics and its applications: linear, quadratic, exponential and logarithmic functions and equations; systems of linear equations and linear programming; compound interest problems and annuities.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: every fall & spring.

MAT 106 Calculus for the Non-Sciences **3 Credits**
Fundamentals of calculus for students in business, or social or behavioral sciences. Credit not allowed if student already has credit for MAT 109 & MAT 110; or MAT 111 or MAT 115.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: every fall, spring, & summer.

MAT 108 Precalculus for Sciences **3 Credits**
Polynomials and rational, exponential, logarithmic, and trigonometric functions. Solving equations. Graphing functions. Trigonometric identities. Credit not allowed if student already has credit for MAT 109, MAT 111, or MAT 115.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: summer.

MAT 109 Calculus with Review I **4 Credits**
For science and mathematics majors. Calculus, with topics from pre-calculus. Logarithmic and exponential functions, trigonometric functions, limits, differentiation. Credit not allowed if student already has credit for MAT 111 or MAT 115.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: fall.

MAT 110 Calculus with Review II **4 Credits**
Continuation of MAT 109. Differentiation, related rates, optimization problems, anti-differentiation, definite integral. Credit not allowed if student already has credit for MAT 111 or MAT 115.
Prerequisite: MAT 109
Offered: spring.

MAT 111 Calculus I **4 Credits**
For science and mathematics majors. Calculus of functions of single variable. Functions, limits, differentiation, continuity, graphing, logarithm, exponential and inverse trigonometric functions, related rates, optimization problems, mean value theorem, l'Hospital's rule, anti-differentiation, definite integral. Credit not allowed if student already has credit for MAT 109 and MAT 110 or for MAT 115.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: fall & spring.

MAT 112 Calculus II **4 Credits**
Applications of integration, integration techniques, improper integrals, sequences, series, convergence tests, Taylor's series, applications; parametric and polar curves.
Prerequisite: minimum grade of C- in one of the following MAT 109 & MAT 110, MAT 111 or MAT 115.
Offered: fall & spring.

MAT 115 Calculus for Business **4 Credits**
Calculus for business students. Differentiation and integration of functions of one variable. Applications, concepts, examples and problems in economics and business. Credit not allowed if student already has credit for either MAT 109 and MAT 110 or for MAT 111.
Prerequisite: 3 1/2 years of high school mathematics.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: fall.

MAT 121 Mathematics through History **3 Credits**
Liberal arts mathematics course. Tracing the development of mathematical ideas globally and through history, with emphasis on problem solving techniques, quantitative thinking, and deductive reasoning.
Prerequisite: 3 years of high school math or equivalent; sophomore standing or higher.
Fulfills College Core: Field 7 (Mathematical Sciences), Global Awareness
Offered: once a year.

MAT 131 Statistics for Social Sciences **3 Credits**
A first course for majors in social or health sciences. Descriptive statistics, calculators, computer programs and introduction to inferential statistics. Credit not allowed if student already has credit for MAT 141 or MAT 351.
Prerequisite: 3 years of high school mathematics or equivalent.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: fall & spring.

MAT 141 Inferential Statistics and Computers for Science **4 Credits**
Elementary probability theory, descriptive statistics, hypothesis testing, estimation, correlation and regression. The computer will be used with one of the standard statistical packages. Credit not allowed if student already has credit for MAT 131 or MAT 351.
Prerequisite: 3 1/2 years of high school mathematics.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: fall & spring.

MAT 150 Mathematics and Politics **3 Credits**
Liberal arts course emphasizing applications of math in the social sciences. Covers topics such as voting theory, decisions made by groups, measurement of political power.
Prerequisite: 3 years of high school mathematics or equivalent.
Fulfills College Core: Field 7 (Mathematical Sciences), Justice
Offered: once a year.

MAT 161 Mathematics for Elementary Teachers **3 Credits**
Designed to provide a solid foundation for the mathematical topics encountered in elementary schools. The primary goal is to develop a deep understanding of mathematical concepts so future teachers can teach with knowledge and confidence. The main topics are: problem solving processes and strategies, elementary set theory, the theory behind basic arithmetic, number systems, basic probability and statistics, elementary geometry.
Prerequisite: 3 years of high school mathematics or equivalent.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: occasionally.

MAT 191 Introduction to Discrete Mathematics **4 Credits**
Fundamental topics with computer science applications. Sets and logic, propositional and predicate calculus, elements of combinatorics and counting, elementary discrete probability, functions and relations, and graphs.
Offered: fall.

MAT 211 Calculus III **4 Credits**
Continuation of MAT 111 and MAT 112. Analytic geometry of 3-dimensional space and calculus of functions of several variables.
Prerequisite: minimum grade of C- in MAT 112.
Offered: fall & spring.

MAT 219 Linear Algebra **4 Credits**
Vector spaces and inner product spaces. Linear transformations and matrices. Eigenvectors, eigenvalues, and applications. Orthogonal transformations. Quadratic forms and quadric surfaces.
Prerequisite: MAT 112 or permission of instructor.
Offered: spring.

MAT 222 Differential Equations **3 Credits**
Introduction to the theory and applications of ordinary differential equations.
Prerequisite: minimum grade of C- in MAT 211; or passing grade in MAT112 with permission of instructor.
Offered: spring.

MAT 230 Logic, Set Theory, and Proofs **4 Credits**
Transition from calculus to upper division courses: logic and methods of proof; set theory; relations, orders and functions; number systems; cardinality.
Prerequisite: minimum grade of C- in MAT 112 or permission of instructor.
Offered: fall.

MAT 301 History of Mathematics **3 Credits**
Development and interrelations of major areas of mathematics, from ancient to modern times. Emphasis on both historical context and mathematical content. Mathematics as cultural heritage.
Prerequisite: MAT 111 & MAT 112.
Offered: occasionally.

MAT 311 Abstract Algebra **4 Credits**
Introduction to the basic structures of abstract algebra; groups, rings, fields.
Prerequisite: minimum grade of C- in both MAT 219 and MAT 230.
Offered: fall.

MAT 312 Topics in Algebra **3 Credits**
Continuation of MAT 311. Selected topics from groups, rings, integral domains, field extensions and Galois theory.
Prerequisite: MAT 311.
Offered: spring of odd-numbered years.

MAT 313 Number Theory **3 Credits**
Divisibility, prime numbers, numerical functions, congruencies, quadratic reciprocity, Diophantine equations.
Prerequisite: MAT 311 or permission of instructor.
Offered: occasionally.

MAT 321 Real Analysis **4 Credits**
Advanced study of limits, continuity, differentiation and integration of functions.
Prerequisite: minimum grade of C- in MAT 211, MAT 219 & MAT 230.
Offered: fall.

MAT 322 Topics in Analysis **3 Credits**
Continuation of MAT 321. Selected topics from functions of one or several variables.
Prerequisite: minimum grade of C- in MAT 321.
Offered: occasionally.

MAT 331 Geometry **3 Credits**
Axioms for geometry and their consequences: independence of the parallel postulate. Rudiments of hyperbolic geometry. Geometric transformations.
Prerequisite: MAT 230.
Offered: fall of even-numbered years.

MAT 341 Numerical Analysis **3 Credits**
The methods used to obtain numerical solutions of functional and differential equations. Polynomial interpolation. Various approximation algorithms.
Prerequisite: MAT 219 & an elementary knowledge of computer programming.
Offered: occasionally.

MAT 342 Graph Theory **3 Credits**
This course covers basic constructions on graphs. Complete graphs, bipartite graphs, trees, cycles, and more general graphs are studied along with their combinatorial properties. Euler circuits, Hamilton circuits, spanning trees. Applications of graphs to optimization problems such as the Traveling Salesperson Problem and Construction of the Minimal Spanning Trees.
Prerequisite: MAT 111 or MAT 115.
Offered: spring of even-numbered years.

MAT 345 Climate and Sustainability **3 Credits**
This course, for majors from all the sciences, develops the use of conceptual models in understanding complicated situations, while illustrating the role of scientific arguments in societal debates about climate change and sustainability. Topics include: the Earth's energy balance, historical data for ocean and atmosphere and temperature and their circulation and oscillation patterns, the carbon cycle and biological systems, and handling large data. The increasingly sophisticated examples explored in the course will introduce the use of various areas of mathematics: linear models and networks, calculus-based dynamical systems, statistics and data assessment, and analysis of periodic phenomena. Students will learn about these topics by seeing simple examples of their use. The last part of the course will center on sustainability issues, and connections to global awareness, diversity, ethics, and justice.
Prerequisite: MAT 111 or equivalent. **Restriction:** seniors only.
Fulfills College Core: Core Capstone
Offered: occasionally.

MAT 351 Probability & Statistics I **3 Credits**
Introduction to the mathematical aspects of modern probability theory and the theory of statistics.
Prerequisite: MAT 211.
Offered: spring.

MAT 352 Probability & Statistics II **3 Credits**
Continuation of MAT 351. Introduction to the mathematical aspects of modern probability theory and the theory of statistics.
Prerequisite: MAT351.
Offered: fall.

MAT 353 Regression Analysis **3 Credits**
Linear regression and correlation. Covariance, residual sum of squares, residual variance, correlation coefficient, tests of significance for correlation coefficient and for regression coefficients. Non-linear regression.
Prerequisite: MAT 351 & MAT 352, or permission of instructor.
Offered: spring of odd-numbered years.

MAT 354 Experimental Design and Statistical Computing **3 Credits**
Analyzing data; one-way/two-way blocking; chi-square, goodness of fit. Statistical computing package; Monte-Carlo simulation-subset selection, central limit theorem; residual plots.
Prerequisite: MAT 351 & MAT 352, or permission of instructor.
Offered: spring of even-numbered years.

MAT 361 Probability for Actuaries **1 Credit**
This course prepares students to take Exam P of the Society of Actuaries or Exam 1 from the Casualty Actuary Society. Key probability concepts are reviewed and students learn to apply these tools to problems encountered by actuaries. The course will develop a thorough command of calculus and probability topics. Additionally, a very basic knowledge of insurance and risk management is introduced.
Prerequisite: MAT 211 & MAT 351. **Corequisite:** MAT 352 or permission of instructor.
Offered: fall.

MAT 362 Financial Mathematics for Actuaries **1 Credit**
This course prepares students to take Exam FM of the Society of Actuaries or Exam 2 from the Casualty Actuary Society. It covers interest theory (discrete and continuous) and an introduction to derivative securities.
Prerequisite: MAT 111 & MAT 112 or permission of instructor.
Offered: spring.

MAT 380 Mathematics Seminar **1 Credit**
Mathematics seminar for majors. To be taken for three semesters.
Prerequisite: junior standing.
Offered: fall & spring.

MAT 381 Mathematics Seminar **1 Credit**
Mathematics seminar for majors. To be taken for three semesters.
Prerequisite: junior standing.
Offered: fall & spring.

MAT 411 Topology **3 Credits**
An introduction to topology, stressing concrete examples including surfaces. Point-set, geometric and algebraic topology with interconnections and applications.
Prerequisite: MAT 230.
Offered: occasionally.

MAT 421 Complex Analysis **3 Credits**
Complex numbers, analytic functions and mappings. Cauchy-Riemann equations, harmonic functions, Cauchy's theorem, integral formula and inequalities. Power series, residues, singularities and zeros, Rouche's Theorem.
Prerequisites: MAT 321 or PHY 335.
Offered: spring of even-numbered years.

MAT 480 Mathematics Seminar **1 Credit**
Mathematics seminar for majors. To be taken for three semesters.
Prerequisite: junior standing.
Fulfills College Core: Oral Communication
Offered: fall & spring.

MAT 498 Internship in Mathematics **1-3 Credits**
Internship involving non-routine tasks linking academic concepts to practical experience. May be used for free elective credit only. Internships require an application and approval by the associate dean.
Prerequisite: permission of the chair & associate dean.
Offered: occasionally.

MAT 499 Independent Study **1-4 Credits**
Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: occasionally.

Military Science Program (ROTC)

Full-Time Faculty: Lieutenant Colonel Daniel Gross; Captain Andrew Burger; Captain Candice Freyburger; Captain Dennis Harris; Captain Marcus Kelley; Master Sergeant Alfredo Burgos; Sergeant First Class Steven T. Langridge; Dwayne Wood, First Sergeant (Retired); Rebecca M. Sparacino, Lieutenant Colonel (Retired); B. Alan Payne, Master Sergeant (Retired); and Sylvia Thomas

The Military Leadership & Science (MLS) Program augments the college learning experience. The cornerstone of the MLS program is the development of leaders. Individual courses support the identification, assessment, and leadership development of young men and women. The goal of the MLS Program is to train confident and competent leaders of character for commissioning as officers in the United States Army, Army Reserve or Army National Guard. Every student taking MLS will learn superior organizational, leadership and managerial skills that will prepare them to lead in public service, business, military, and community organizations. This program is open to students of all majors and there is no requirement for previous military service or experience.

The traditional MLS program is four years: a two-year Basic Course (six credit hours/year), for which no military obligation is incurred, and a two-year Advanced Course (six credit hours/year), plus a US Military History Course (3 credits); for which there is a military obligation.

The **Basic Course** refers to the first and second year of the MSL curriculum. It is designed as a classroom and lab course that stresses the fundamentals of leadership. A freshman student would enroll in MLS 101 and MLS 111 in the fall and MLS 102 and MLS 112 in the spring. A sophomore would enroll in MLS 201 and MLS 211 in the fall and MLS 202 and MLS 212 in the spring. These courses are designed for students who want to improve their leadership. Instructors develop their students' physical, mental and critical thinking skills through team building and collective hands-on problem solving case studies. A number of popular and challenging extra-curricular activities

are available for students who take these courses. Students may take up to twelve Basic Course credits without obligation. The basic course sequence is required for all students that want to qualify for entry into the Advanced Course. MLS 210-Basic Camp is held at Fort Knox, KY, between the summer of the student's sophomore and junior year. Basic Camp is a mandatory component for students who have not completed the 100- and 200-level MLS courses/labs. Students, with prior military service may also receive placement credit directly into the Advanced Course with approval from the Department Chair.

The **Advanced Course** is comprised of MLS 301 & MLS 311, MLS 302 & MLS 312, MLS 401 & MLS 411, MLS 402 & MLS 412, and MLS 480. Upon completion of this sequence and successful completion of Advanced Camp students are commissioned as Second Lieutenants in the Army, Army National Guard, or Army Reserve. Based on the students' area of study, Military Science 300- and 400- level courses continue to bear free elective credit that may be used toward a student's 120 hours needed to graduate.

For more information students should contact the Military Science Department located on the first floor in the Health Science Building.

Military Science Summer Credit

During the summer, students may receive 3 credits for completing MLS 210 at Ft. Knox, KY. CIET is a 29-day training program that is mandatory for all students seeking a Commission. Students must meet all contracting criteria to attend CIET; attendance may occur between either the freshman and sophomore year or sophomore and junior year. For more information on this program, contact the Military Science Department.

Juniors can receive credit for MLS 310 at Ft. Knox, KY during the summer between their junior and senior year. This is a demanding 30-day course designed to increase critical thinking and enhance leadership skills and is mandatory for all Advanced Course ROTC cadets.

Further details are available through the Canisius College Department of Military Science website (https://www.canisius.edu/academics/programs/rotc-canisius/).

Curriculum

Basic Course (incurring no military obligation)

Code	Title	Credits
MLS 101 & MLS 111	Introduction to the Army and Critical Thinking and Leadership Lab	3
MLS 102 & MLS 112	Introduction to Profession of Arms and Leadership Laboratory	3
MLS 201 & MLS 211	Foundations of Leadership and Leadership Laboratory	3
MLS 202 & MLS 212	Foundations of Tactical Leadership and Leadership Laboratory	3

Advanced Course (incurring military obligation)

Student must either complete the Basic Course above or MLS 210 to enter the Advanced Course sequence.

Code	Title	Credits
MLS 301 & MLS 311	Adaptive Team Leadership and Advanced Leadership Lab	3
MLS 302 & MLS 312	Applied Team Leadership and Advanced Leadership Lab	3
MLS 401 & MLS 411	Mission Command and the Army Profession and Senior Leadership Laboratory	3
MLS 402 & MLS 412	Mission Command and the Company Grade Officer and Senior Leadership Laboratory	3
MLS 480	U.S. Military History	3

Note: Students are required to sign up and participate in Leadership Labs during the Advanced Course even though they do not receive credit for the labs.

Roadmap

The following sequence of Military Science 100 and 200 level courses can each be counted as a 3.0 credit, free elective:

Freshman	
Fall	**Spring**
MLS 101 & MLS 111	MLS 102 & MLS 112
Sophomore	
Fall	**Spring**
MLS 201 & MLS 211	MLS 202 & MLS 212
Junior	
Fall	**Spring**
MLS 301 & MLS 311	MLS 302 & MLS 312
Senior	
Fall	**Spring**
MLS 401 & MLS 411	MLS 402 & MLS 412
MLS 480 (may be taken any semester of junior or senior year)	

Note: Students must present Medical Documentation signed by their doctor in order to participate in the lab portion. The required form is available at the Army ROTC department at Canisius College.

Courses

MLS 101 Introduction to the Army and Critical Thinking **3 Credits**
This course introduces Cadets to the personal challenges and competencies that are critical for effective leadership. Cadets learn how the personal development of life skills such as critical thinking, time management, goal setting, stress management, and comprehensive fitness relate to leadership, and the Army profession. Optional: Leadership Lab; three one-hour physical readiness training (PRT) sessions; one Field Training Exercise (FTX) per semester.
Offered: every fall.

MLS 102 Introduction to Profession of Arms **3 Credits**
This course introduces Cadets to the personal challenges and competencies that are critical for adaptive leadership. Cadets learn the basic of the communications process and the importance for leader's to develop the essential skills to effectively communicate in the Army. Students will examine the Army Profession and what it means to be a professional in the US Army. Optional: Leadership Lab; three one-hour PRT sessions; one Joint FTX (JFTX) per semester.
Offered: spring.

MLS 111 Leadership Lab **0 Credits**
Students are given opportunities to lead their peers in hands-on training in basic military skills such as land navigation, rifle marksmanship, tactics, drill and ceremony, first aid training and survival swimming.
Prerequisite: Concurrent Enrollment in MLS 101, 102, 201 or 202. All students will be required to provide medical documentation that they are fit to participate in a normal college physical education course. Lab is conducted on Thursday from 3:00-5:00pm every week.
Offered: fall.

MLS 112 Leadership Laboratory **0 Credits**
Students are given opportunities to lead their peers in hands-on training in basic military skills such as land navigation, rifle marksmanship, tactics, drill and ceremony, first aid training and survival swimming. Lab is conducted on Thursday from 3:00-5:00 pm every week.
Prerequisite: all students will be required to provide medical documentation that states they are fit to participate in a normal college physical education course. **Corequisite:** MLS 101, MLS 102, MLS 201 or MLS 202.
Offered: spring.

MLS 199 Independent Study **3 Credits**
Students study selected military topics under the supervision of a cadre member.
Prerequisite: permission of the professor of military science.

MLS 201 Foundations of Leadership **3 Credits**
This course explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Aspects of personal motivation and team building are practice planning, executing and assessing team exercises. Optional: leadership labs, three one-hour PRT sessions, one FTX per semester.
Fulfills College Core: Oral Communication
Offered: fall.

MLS 202 Foundations of Tactical Leadership **3 Credits**
This course examines the challenges of leading teams in the complex operational environment. The course highlights dimensions of terrain analysis, patrolling, and operations orders. Further study of the theoretical basis of the Army Leadership Requirements Model explores the dynamics of adaptive leadership in the context of military operations. Cadets develop greater self awareness as they assess their own leadership styles and practice communication and team building skills. Optional: leadership labs, three one-hour PRT sessions, one JFTX per semester.
Offered: spring.

MLS 210 Basic Camp **3 Credits**
Required for all students seeking a Commission in the U.S. Army, Army Reserve or Army National Guard; this 29-day course is designed to challenge Cadets mentally, physically and prepare them to meet the challenges of becoming a Commissioned Officer. Basic Camp allows students to enter the ROTC Advanced Course without having taken MLS100 and 200 level courses. Students must be contracted to attend Basic Camp.
Restrictions: students must be approved by the ROTC enrollment officer to register.
Offered: summer.

MLS 211 Leadership Laboratory **0 Credits**
Students are given opportunities to lead their peers in hands-on training in basic military skills such as land navigation, rifle marksmanship, tactics, drill and ceremony, first aid training and survival swimming. Lab is conducted on Thursday from 3:00-5:00 pm every week.
Prerequisite: all students will be required to provide medical documentation that states they are fit to participate in a normal college physical education course. **Corequisite:** MLS 101, MLS 102, MLS 201 or MLS 202.

MLS 212 Leadership Laboratory **0 Credits**
Students are given opportunities to lead their peers in hands-on training in basic military skills such as land navigation, rifle marksmanship, tactics, drill and ceremony, first aid training and survival swimming. Lab is conducted on Thursday from 3:00-5:00 pm every week.
Prerequisite: all students will be required to provide medical documentation that states they are fit to participate in a normal college physical education course. **Corequisite:** MLS 101, MLS 102, MLS 201 or MLS 202.
Offered: spring.

MLS 280 Cultural Understanding and Language Proficiency **3 Credits**
MSL 280 Cultural Understanding and Language Proficiency (CULP) is a 23-day overseas mission in support of Army Service Component Command Security Cooperation Objectives. These cultural awareness missions to provide future leaders with opportunities to develop regional experience and cultural competencies. All Cadets receive cross-cultural training, and select Cadets deploy to locations around the world for experiential cultural awareness training. These deployments – Cadet overseas training missions (COTMs) – develop astute future leaders, while helping build and strengthen strategic relationships.
Prerequisites: MLS 101 & MLS 102 and must be ROTC Contracted Cadet.
Offered: every fall.

MLS 299 Independent Study **3 Credits**
Students study selected military topics under the supervision of a cadre member.
Prerequisite: permission of the professor of military science.

MLS 301 Adaptive Team Leadership **3 Credits**
This course challenges Cadets to study, practice, and evaluates adaptive leadership skills as they are presented with challenging scenarios related to squad tactical operations. Cadets receive systematic and specific feedback on their leadership attributes and actions. Based on such feedback, as well as their own self-evaluations, Cadets continue to develop their leadership and critical thinking abilities.
Prerequisite: approval of ROTC enrollment officer. **Corequisite:** MLS 311L.
Offered: fall.

MLS 302 Applied Team Leadership **3 Credits**
This course is an academically challenging course where you will study, practice, and apply the fundamentals of Army Leadership, Officership, Army Values and ethics, personal development, and small unit tactics at the team and squad level. At the conclusion of this course, you will be capable of planning, coordinating, navigating, motivating and leading a team or squad in the execution of a tactical mission.
Prerequisite: student must be a contracted Cadet. **Corequisite:** MLS 312.
Offered: spring.

MLS 310 Advanced Camp **3 Credits**
CLC is a demanding 30 day course held at Fort Knox, KY which is designed to increase critical thinking skills and enhance leadership skills. It is required for all Advanced Course ROTC cadets. In addition to proving their leadership ability, cadets must meet established standards in physical fitness and demonstrate proficiency in military skills.
Prerequisites: MLS 301, 311, 302 and 312.
Offered: summer.

MLS 311 Advanced Leadership Lab **0 Credits**
Cadets apply basic military skills in small peer learning exercises and small unit training operations. Leadership positions are rotated to solve problems in tactics, land navigation, logistics and crisis reaction. Leadership lab is required for all contracted cadets working to earn a commission.
Corequisite: MLS 301.
Offered: fall.

MLS 312 Advanced Leadership Lab **0 Credits**
Cadets apply basic military skills in small peer learning exercises and small unit training operations. Leadership positions are rotated to solve problems in tactics, land navigation, logistics and crisis reaction. Leadership lab is required for all contracted cadets working to earn a commission.
Prerequisites: MLS 301 and MLS 311. Corequesite: MLS 302.
Offered: spring.

MLS 399 Independent Study **3 Credits**
Students study selected military topics under the supervision of a cadre member.
Prerequisite: permission of the professor of military science.

MLS 401 Mission Command and the Army Profession **3 Credits**
Mission Command and the Army Profession explore the dynamics of leading in the complex situations of current military operations. You will examine differences in customs and courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. You also explore aspects of interacting with non-government organizations, civilians on the battlefield, the decision making processes and host nation support.
Prerequisites: MLS 301/311, MLS 302/312 and student must be a contracted Cadet. **Corequisite:** MLS 411L.
Fulfills College Core: Oral Communication
Offered: fall.

MLS 402 Mission Command and the Company Grade Officer **3 Credits**
Mission Command and the Company Grade Officer explore the dynamics of leading in the complex situations during Unified Land Operations I, II, and III. Examine the Art of Command and how to properly communicate with your NCOs and Soldiers during Taking Charge 1, 2 and 3, and Developing Others (counseling). During Cultural Awareness and Cultural Property Protection (CPP), you will discuss numerous situations on how ethical decisions impact personnel and the unit mission. Through the understanding of your roles and responsibilities, you will learn about Comprehensive Soldier Fitness (CSF), Being Ready and Resilient (R2C), and Individual and Family Readiness can assist you in preparing your Soldiers and their Families on reducing and managing stress during times of uncertainty.
Prerequisite: student must be a contracted Cadet. **Corequisite:** MLS 412.
Fulfills College Core: Oral Communication
Offered: spring.

MLS 411 Senior Leadership Laboratory **0 Credits**
Under cadre supervision, seniors plan, conduct and evaluate training for the underclass leadership labs. Seniors provide instruction, coaching and mentoring to underclass cadets, and conduct command and staff activities needed to run the cadet battalion. Participate in separate labs to enhance their understanding of Military operations.
Corequisite: MLS 401. **Restriction:** Approval by the ROTC enrollment officer.
Offered: fall.

MLS 412 Senior Leadership Laboratory **0 Credits**
Under cadre supervision, seniors plan, conduct and evaluate training for the underclass leadership labs. Seniors provide instruction, coaching and mentoring to underclass cadets, and conduct command and staff activities needed to run the cadet battalion. Participate in separate labs to enhance their understanding of Military operations.
Corequisite: MLS 402. **Restriction:** Approval by the ROTC enrollment officer.
Offered: spring.

MLS 480 U.S. Military History **3 Credits**
Explore the evolution of the United States Army from its origins in the Revolutionary War all the way through current operations in Iraq/Afghanistan as well as the Global War on Terrorism. We will discuss in depth the effects the growth of our nation had on the development of a Professional Army. Students will gain an appreciation for the history of the U.S. Military through the study of wars, campaigns and battles while also gaining an understanding of the differences between strategic, operational and tactical levels. Further insight into battles will be taught by reflecting on events utilizing the 9-principles of war as a means of battle analysis. We will also explore the effects politics and international policy has on determining military strategies, also touching on the effects that different cultures/ethnic groups have on both past and present military operations.
Prerequisites: student must be a contracted Cadet.

MLS 499 Independent Study **3 Credits**
Students study selected military topics under the supervision of a cadre member.
Prerequisite: permission of the professor of military science.

Modern Languages, Literatures and Cultures

Chair: Richard Reitsma, PhD

Introduction

Our primary mission is to instill an awareness of language as an essential element of our thought processes, perceptions, and self-expressions. As recent world events have demonstrated, deep cultural knowledge and linguistic competence are necessary if one wishes to understand other people and their communities. We seek to provide students with the skills and intellectual breadth needed to communicate effectively and to play an active role in today's world. The Department of Modern Languages, Literatures and Cultures offers a Spanish major and minors in French and Spanish, as well as instruction in Italian and Polish. Language study combines uniquely with virtually any major; but of particular interest and practicality are dual majors with International Business and Marketing, International Relations, Bilingual Education, and Biology. Skills in a foreign language are often the deciding factor in an employer's choice between our graduates and equally qualified but monolingual peers. Language majors pursue rewarding careers in social work, international business, government service, teaching, interpreting, and scientific research, to mention but a few of the many exciting possibilities.

Over the course of the semester, each student in the Department of Modern Languages, Literatures and Cultures participates in or attends two cultural events or activities outside regular class time. Please consult the department for a listing of these offerings.

Qualifications

Each language course offered in the department must be completed with a grade of C or better in order to proceed to the next level. Any course with a grade of C- or below must be repeated. A placement exam, in combination with high school language experience, IB or AP exam scores, etc. will determine initial placement in the course sequences.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors

should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Modern Languages, Literatures and Cultures majors are required to study abroad for a minimum of four consecutive weeks in a formal pre-approved program in a country where the target language is an official language. Consultation with a department of Modern Languages, Literatures and Cultures academic advisor, and the chair, is required prior to study abroad.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Additional information about dual majors is provided in the Modern Languages, Literatures, and Cultures curriculum information.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Native Speakers

Students who are native speakers of languages other than English may pursue a major in their native language. These students usually begin at the 300-level language courses.

Native speakers of languages other than English receive a language requirement waiver for other programs requiring a certain level of language proficiency if they are able to provide documentation of their native speaker status. Examples of documents include, but are not limited to, a school diploma received from a country where the language of instruction is not English or an internationally recognized examination certifying language abilities.

The Modern Languages, Literatures, and Cultures Department offers a Spanish major and minors in three languages.

Majors

- Spanish (p. 201)

Study abroad is required for any language major and encouraged for minors. There are a variety of study abroad options that are detailed in the description of each program.

Minors

The language minor is an interdisciplinary program aimed at developing Intermediate language skills and broad cultural understandings. It is designed with flexibility in order to accommodate students' personal and professional interests. Language and cultural studies minors prove to be important assets when seeking employment or applying to graduate schools. It also provides an incentive for students to study in upper division language and literature courses. Students who reach the intermediate level of French or Spanish have the opportunity of studying in Argentina, Costa Rica, Cuba, France, and Spain.

Students must complete six courses for Language and Culture Minor programs in French and Spanish.

- French (p. 200)
- Spanish (p. 203)

Up to two of these courses can be replaced by two FRC/SPA electives or two approved courses from other departments or two approved courses from study abroad. Pre-approved Internships and Campus Ministry service trips may count toward a minor. All electives from other departments are subject to the Department of Modern Languages, Literatures, and Cultures Chair's pre-approval, such as courses in PSC, LAS, IR, HIST, or HON.

Spanish (SPA) (p. 203)
French (FRC) (p. 200)
Italian (ITA) (p. 199)
Polish (POL) (p. 200)

Italian (ITA)

ITA 103 Introductory Italian I **3 Credits**
Reading, writing, listening and speaking. Introduction to Italian culture. Course aim is for almost exclusive use of Italian in class.
Offered: fall.

ITA 104 Introductory Italian II **3 Credits**
Continuation of ITA 103. Reading, writing, listening and speaking. Introduction to Italian culture. Course aim is for almost exclusive use of Italian in class.
Prerequisite: minimum grade of C in ITA 103 or permission of chair.
Offered: spring.

ITA 215 Intermediate Italian **3 Credits**
Continued development in writing, listening, speaking and especially reading Italian literary and cultural material. Comprehensive grammar review. Continued aim of almost exclusive use of Italian in class. Course may be offered via Study Abroad. Offered only occasionally. Please check with instructor and department chair for more information including travel fees.
Prerequisite: minimum grade of C in ITA 104.
Offered: occasionally.

Polish (POL)

POL 102 Survival Polish **1 Credit**
Designed specifically for participants in the Campus Ministry annual trip to Poland. The goals for the course are directly related to the environment in which students work: summer camp for children. Offered occasionally: check with instructor, department chair, and campus ministry for further information.
Prerequisite: permission of instructor.
Offered: occasionally.

French Minor

Minor

Code	Title	Credits
Intermediate Level Courses		
FRC 215	Intermediate French	3
FRC 217	Intermediate French II	3
Intermediate High Level Conversation and Composition Courses		
FRC 323	Cinema for French Conversation	3
FRC 324	French Composition through Literature	3
FRC 325	Déjà vu, lu, entendu! News and contemporary issues in the Francophone media	3
Advanced Low Courses		
One FRC elective (this list may change, current electives include the following)		3
FRC 427	Identities and Globalization	
FRC 433	L'écriture de soi--The autobiography genre in French and Francophone Literature	
FRC 447	Territories and Cultures of the French & Francophone world: conquest/resistance/dev't & conservation	
FRC 457	Rebellion & Belonging in French History & Politics 1789-2017	
Total Credits		18

Up to two of these courses can be replaced by two FRC/GER/SPA electives or two approved courses from other departments or two approved courses from study abroad. Pre-approved Internships and Campus Ministry service trips may count toward a minor. All electives from other departments are subject to pre-approval by the chair of the DMLLC.

Courses

FRC 103 Introductory French I **3 Credits**
Reading, writing, listening and speaking. Introduction to French and francophone cultures. Almost exclusive use of French in class.
Offered: every fall.

FRC 104 Introductory French II **3 Credits**
Reading, writing, listening and speaking. Introduction to French and francophone cultures. Almost exclusive use of French in class.
Prerequisite: minimum grade of C in FRC 103 or equivalent (generally two to three years of high school French) or permission of the Chair.
Offered: spring.

FRC 215 Intermediate French **3 Credits**
This course is designed as a thorough review of grammatical structures. Also emphasized is the building of vocabulary, increasing competence in the four skills (reading, writing, listening and speaking) and gaining an overview of Francophone cultures. Exclusive use of French in class.
Prerequisite: minimum grade of C in FRC 104 or two or three years of high school French.
Offered: fall.

FRC 217 Intermediate French II **3 Credits**
This course is designed to thoroughly develop the four skills necessary for proficiency in French: reading, writing, listening and speaking. Also emphasized is the building of vocabulary in authentic cultural and literary contexts. Students will be introduced to the discussion of a full-length novel. The class is conducted in French.
Offered: Spring.

FRC 300 Intermediate Internship **3 Credits**
Is an internship designed to provide a six-week immersion experience at the intermediate, low-advanced level. Students who participate in this program will serve as teaching assistants for English at the Ecole Nouvelle Meudon in a suburb of Paris. They will enhance their knowledge of French language and French culture through a homestay with host families and through their attendance in art and history classes delivered at the school. Students will be assessed on their involvement in the assistantship program at La Source and on the weekly reports that they will submit via a D2L platform dedicated to this program.
Prerequisites: min grade of C in FRC 217.

FRC 323 Topics in Conversation I **3 Credits**
Contemporary communication skills emphasized in general exploration of contemporary culture of the Francophone world. Exclusive use of French in class. Phonetics included.
Prerequisite: minimum grade of C in FRC 217 or equivalent or permission of department chair.
Offered: fall.

FRC 324 French Composition through Literature **3 Credits**
Distinguishing and producing effective and personal writing of different types - essays, correspondence, descriptions, self-portraits, and reports - through the analysis of the major literary currents of French literature, its canons, techniques and major contributions. Selected works of prose, poetry, and theater are discussed. Exclusive use of French in class.
Prerequisite: minimum grade of C in FRC 217 or equivalent or permission of department chair.
Offered: Spring

FRC 325 Déjà vu, lu, entendu! News and contemporary issues in the Francophone media **3 Credits**
FRC325 is an intermediate level course aimed at developing effective communication skills and targeting fluency in oral expression and verbal comprehension. The class is based on discussion of contemporary issues in the francophone world and is conducted entirely in French. Traditional (radio, newspaper, television) and digital media will be closely analyzed to comprehend foreign policies, environmental matters, civil rights, economics, and family structures, as well as the scientific and technological changes brought about by the integration of francophone societies into a globalizing world. Through a broad range of topics, students will be invited to develop not only their language skills, but also their curiosity for the place of news in the francophone world.
Prerequisite: grade of C or better in FRC 217 or permission of instructor.
Offered: spring of odd-numbered years.

FRC 326 Threads: weaving industry, culture, and commerce through the history of textiles. **3 Credits**
Taught in English, this course explores the many aspects of textile production, one of the world's oldest and most thoroughly globalized industries. Textile production integrates agriculture, industry, engineering, and design, all of which will be considered from historical and contemporary perspectives. Although this course is not a survey on the history of fashion, it will integrate a study of apparel construction and production, with an introduction to the legal and technical frameworks in use in the current ready-to-wear industry. This course incorporates an individualized project for assessment. Students will need to choose the area in which they will complete their project among the categories offered (textiles for second languages, for historians, for designers, or for business).
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.

FRC 400 French Internship **3 Credits**
Professional Internship. Open to ALL majors, though intermediate French knowledge expected. Internships require an application and approval by the associate dean.
Prerequisite: permission of the department chair & associate dean.

FRC 417 The French and Francophone World at Work **3 Credits**
This course will embark on a study of French and francophone working society at large. The practical approach will lead students to develop a series of written and oral artifacts, designed to simulate a realistic experience working in a French context. Interviews, cover letters, CVs, goals and objectives, and negotiation will be practiced. In parallel, the course, which will be conducted entirely in French, will discuss the French and francophone work force in its wide-ranging social and economic facets. The major questions of working time, innovation, legislation, life-work balance, as well as integration in global competition, will be considered.
Prerequisites: minimum grade of C or better in FRC 217 or FRC 332, and C or better in FRC 323 or FRC 324, or permission of instructor.
Offered: fall, every 3 years.

FRC 427 Identities and Globalization **3 Credits**
In the broader context of a globalized world, this course will examine the integration and resistance of identities through a discussion of the institutions of post-war France and the technological developments, and evolution of political structures, with a particular emphasis on current events and contemporary media. This class is entirely conducted in French.
Prerequisites: minimum grade of C or better in FRC 217 or FRC 332, and C or better in FRC 323 or FRC 324, or permission of instructor.
Offered: occasionally.

FRC 433 L'écriture de soi--The autobiography genre in French and Francophone Literature **3 Credits**
This course is a survey of the major intellectual and artistic trends of the twentieth century in France and the francophone world through a study of significant poetic, prose, and dramatic works by various authors of the French literary canon. The genre of autobiography is the gate of entry for this advanced course. The book selection will invite students to discover the diverse territories and cultures in rural France, Paris, Congo, Vietnam, Québec, and the Maghreb, among others, through the lens of individual lives. Such a program will lead us to discuss the rich lives, of renowned authors who wanted to share with their readers the story of their voyages. The genre of autobiography opens numerous themes and questions including immigration by choice or obligation, nostalgia, cultural fusion, decolonization, materialism, and exoticism.
Prerequisites: minimum grade of C or better in FRC 217 or FRC 332, and C or better in FRC 323 or FRC 324, or permission of instructor.
Offered: occasionally.

FRC 447 Territories and Cultures of the French & Francophone world: conquest/resistance/dev't & conservation **3 Credits**
The territories of the francophone world, spread over four continents, are the legacy of cultural and historical constructions, conflicts and ideals. What were the contributions of travelers such as Chateaubriand, Rousseau or Champlain to our knowledge and perception of Syria, Lebanon or Quebec? How does the colonial past affect the infrastructure of modern-day Asia and Africa? What were the different stages of occupation and transformation of the Bay of Tonkin? What were the sites of the Algerian resistance, and who were the leaders of the Maghreb Awakening? The course will explore these kinds of questions through the writings of francophone authors. Through the work of Maryse Condé, the unique biotope of the mangrove in Guadeloupe and its creole culture will be analyzed together. With the historian Fernand Braudel, the topic of France as part of the greater Mediterranean world will be debated. The course will also include a discussion of the transformation of the territories, their usages and perception, through Michel Houellebecq's thought-provoking essay, "The Map and the Territory." Between development and conservation, the changing roles of tourism and agriculture, as former adversaries and new allies, will also be part of this trans-disciplinary study.
Prerequisite: FRC 217.
Offered: spring of even-numbered years.

FRC 457 Rebellion & Belonging in French History & Politics 1789-2017 **3 Credits**
This course examines the strengths and challenges of national integration and rebellion in France from the French Revolution to the 2017 presidential elections. The French Revolution of 1789 will launch this survey of the major events that led to the construction of Modern France. Since the Revolution's outbreak, observers have debated several questions: What is the legacy of the French Enlightenment? What were the causes of the French Revolution? How did the Napoleonic conquests create a new social order while also raising fierce resistance among European societies? In what ways were the Haussmann architectural reforms of Paris a response to the revolutionary culture of "the barricade"? Was the "Paris Commune" a pre-communist movement? Who were the heroes of the Résistance during World War II and how did their ideals and struggles shape a new role model for the post-war generations? We will also examine the cultural changes that led to the end of the De Gaulle era, the Mai 68 uprising, the sexual revolution, and the adhesion of France to a new and peaceful European ideal. Was the 2017 presidential election a democratic reaction against the traditional two-party system? The course aims to interrogate over two centuries of French history since 1789, reading across the disciplines.
Prerequisites: C or better in FRC 215 or FRC 217 and FRC 323, FRC 324, FRC 331 or FRC 332.
Offered: every third fall.

FRC 499 Independent Study **3 Credits**
Independent study requires permission of the chair and associate dean. Independent studies require an application and approval by the associate dean.
Prerequisite: minimum grade of C or better in FRC 217 or FRC 332, and C or better in FRC 323 or FRC 324, or permission of instructor.

Spanish (BA)

Chair: Dr. Richard D. Reitsma, PhD (reitsmar@canisius.edu)

Our primary mission is to instill an awareness of language as an essential element of our thought processes, perceptions, and self-expressions. As recent world events have demonstrated, deep cultural knowledge and linguistic competence are necessary if one wishes to understand other people and their communities. We seek to provide students with the skills

and intellectual breadth needed to communicate effectively and to play an active role in today's world. The Department of Modern Languages, Literatures, and Cultures (p. 198) offers a Spanish major and minors in French and Spanish, as well as instruction in Italian and Polish. Language study combines uniquely with virtually any major; but of particular interest and practicality are dual majors with International Business and Marketing, International Relations, Bilingual Education, and Biology. Skills in a foreign language are often the deciding factor in an employer's choice between our graduates and equally qualified but monolingual peers. Language majors pursue rewarding careers in social work, international business, government service, teaching, interpreting, and scientific research, to mention but a few of the many exciting possibilities.

All students in Spanish classes are expected to participate in tertulias to practice the language in a more informal setting. Spanish classes include a fee (p. 27) to cover tertulia costs. Additionally, over the course of the semester, each student in the Department of Modern Languages, Literatures, and Cultures participates in or attends two cultural events or activities outside regular class time. Please consult the department for a listing of these offerings.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Single language majors are required to complete ten courses at the 200-level or higher in a primary language. The requirements are:

Code	Title	Credits
Intermediate Level Courses		
SPA 215	Intermediate Spanish	3
SPA 217	Introduction to Spanish Composition	3
Intermediate-High Level Conversation and Composition Courses		
SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3
Advanced Courses		
Five SPA electives		15
SPA 490	Spanish Capstone Portfolio Project	1
Total Credits		31

If starting at 300-level or its equivalent, two additional electives must be completed in order to achieve the required 10 course total for the major (6 for the minor).

Study Abroad Requirements

Modern Languages, Literatures and Cultures majors are required to fulfill an immersion experience in the language they are studying.

1. A study abroad experience for a minimum of four consecutive weeks in a formal, pre-approved program in the studied language is required (this could be a short-term or semester-long experience). The department chair may approve alternate immersive experiences as fulfilling this requirement in exceptional circumstances. These alternate immersive experiences may not carry language credit. Students are encouraged to consult with the chair.
2. Language majors who choose to spend a semester abroad at a foreign university may count up to three courses (9 credits) toward their Modern Language major as long as these courses are taught in the target language and have been pre-approved by the chair of the department of Modern Languages, Literatures and Cultures.
3. Students who spend more than one semester studying at a foreign university may count up to an additional two courses toward their Modern Language major, if pre-approved by the chair of the department of Modern Languages, Literatures and Cultures. Thus, a student who studies abroad for two semesters may count a maximum of 5 courses (15 credits total) toward their language major(s).
4. Dual majors in two languages are required to study abroad in both languages. The target languages must be one of the official languages of the country.
5. Credits for short-term and immersion programs are determined by the department chair and are based on the contact hours in the language.
6. As a general rule, students complete the 200-level sequence or the equivalent and one 300-level course at Canisius College prior to studying at a foreign university or completing their alternate immersion experience.
7. Consultation with a department of Modern Languages, Literatures and Cultures academic advisor is required prior to study abroad.
8. Students must complete at least one course in the major upon return to Canisius College.

Cultural Requirement

Over the course of the semester, each student in the Department of Modern Languages, Literatures and Cultures will participate in or attend two cultural events or activities outside regular class time. Please consult the department for a listing of these offerings.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Please note that the following road map shows a typical progression for students that begin the SPA major with SPA 215. Students who start at a different level or who are double-majoring should meet with the chair to plan their course of studies. We have also provided a roadmap for students who are starting at the introductory level below.

Freshman	
Fall	**Spring**
SPA 215	SPA 217
Sophomore	
Fall	**Spring**
SPA 323	SPA 324
	SPA 332
Junior	
Fall	**Spring**
Study Abroad[1]	SPA elective[2]
	SPA elective[2]
Senior	
Fall	**Spring**
SPA elective[2]	SPA elective[2]
SPA 490	

1 Students should meet with the chair to plan course schedules for their study abroad and how those courses count toward the student's SPA major.

2 Students should meet with the chair to determine which courses may be counted as SPA electives for the major

Recommended Semester Schedule for Major Course Requirements (if beginning at introductory level)

Freshman	
Fall	**Spring**
SPA 103	SPA 104
Sophomore	
Fall	**Spring**
SPA 215	SPA 217
Junior	
Fall	**Spring**
SPA 323	SPA 324
SPA elective[2]	SPA 332
Senior	
Fall	**Spring**
Study Abroad (at least two courses need to count toward the major)[1]	SPA elective[2]
	SPA elective[2]
	SPA 490

1 Students should meet with the chair to plan course schedules for their study abroad and how those courses count toward the student's SPA major.

2 Students should meet with the chair to determine which courses may be counted as SPA electives for the major

Learning Goals & Objectives

Student Learning Goal 1

Spanish Language majors will demonstrate effective skills at the ACTFL advanced-low level according to two Communicative Modes: Interpersonal and Presentational.

Students will:

- **Objective A:** Actively and accurately negotiate meaning in fluent interpersonal communications.
- **Objective B:** Accurately and fluently present oral information, concepts and ideas in a cohesive manner to an audience.

Student Learning Goal 2

Spanish Language majors will critically analyze cultural production in the target language.

Students will:

- **Objective A:** Assess, interpret and assign meaning to numerous types of cultural production including literature, film, essay, and art.
- **Objective B:** Place various types of cultural production in a wider cultural and historical context.

Student Learning Goal 3

Spanish Language majors will design and carry out an original project in which the target language is the major research tool and vehicle of expression.

Students will:

- **Objective A:** Create a project that demonstrates comprehension of cultural productions indicated by a clear thesis and a developed argument.
- **Objective B:** Demonstrate a mastery of information literacy tools and the integration of secondary sources in his/her work.

Minor

Code	Title	Credits
Intermediate Level Courses		
SPA 215	Intermediate Spanish	3
SPA 217	Introduction to Spanish Composition	3
Intermediate High Level Conversation and Composition Courses		
SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3
Advanced Low Courses		
One SPA elective		3
Total Credits		18

Up to two of these courses can be replaced by two FRC/SPA electives or two approved courses from other departments or two approved courses from study abroad. Pre-approved Internships and Campus Ministry service trips may count toward a minor. All electives from other departments are subject to pre-approval by the chair of the DMLLC.

Courses

SPA 103 Introductory Spanish I **3 Credits**
Reading, writing, listening and speaking. Introduction to Hispanic culture. Almost exclusive use of Spanish in class.
Offered: every fall.

SPA 104 Introductory Spanish II **3 Credits**
Reading, writing, listening and speaking. Introduction to Hispanic culture. Almost exclusive use of Spanish in class.
Prerequisite: minimum grade of C in SPA 103 or equivalent or permission of chair.
Offered: fall & spring.

SPA 215 Intermediate Spanish **3 Credits**
Building on grammar and vocabulary learned in 103 & 104, this course continues the focus on grammar and vocabulary and increasing competence in the four linguistic skills and gaining an overview of Hispanic cultures. Emphasizing writing and speaking. Exclusive use of Spanish in class.
Prerequisite: minimum grade of C in SPA 104 or equivalent or permission of chair.
Offered: fall & spring.

SPA 217 Introduction to Spanish Composition **3 Credits**
The first of two composition courses designed as a thorough review of grammatical structures, with a focus on Spanish composition and translation at the intermediate level. Courses focuses on historical and contemporary realities of Latin America including indigenous populations, economics, environment, human rights, politics, art and music. Course will explore these issues via cultural icons such as Sor Juana, Frida Kahlo, Che, Residente, and others. Extensive use of GoogleDocs. Emphasizes the building of vocabulary, increasing competence in the four linguistic skills (reading, writing, listening, speaking) and gaining an overview of Hispanic cultures. Exclusive use of Spanish in class.
Prerequisite: minimum grade of C in SPA 215 or equivalent or permission of chair.
Offered: fall & spring.

SPA 323 Topics in Conversation I: Peninsular Culture and Conversation **3 Credits**
One of 2 non-sequential conversation courses. Contemporary communication skills emphasized in general exploration of contemporary culture of Spain. Exclusive use of Spanish in class. Weekly conversation with peers in Latin America or Spain via Skype (Dual Immersion).
Prerequisite: minimum grade of C in SPA 217 or equivalent or permission of chair.
Offered: fall.

SPA 324 Topics in Conversation II: Latin American Culture and Civilization **3 Credits**
One of 2 non-sequential conversation courses. Contemporary communication skills emphasized in general exploration of contemporary culture of Latin America. Exclusive use of Spanish in class. Weekly conversation with peers in Latin America via Skype (Dual Immersion).
Prerequisite: minimum grade of C in SPA 217 or equivalent or permission of chair.
Offered: spring.

SPA 332 Advanced Spanish Composition **3 Credits**
Distinguishing and producing effective writing based on short stories and short films. Emphasis on advanced structures of Spanish grammar. Exclusive use of Spanish in class.
Prerequisite: minimum grade of C in SPA 217 or equivalent or permission of chair.
Offered: spring.

SPA 336 Latin@s in the US: Latino Literature and Film **3 Credits**
The course will explore the Latino struggle of belonging, or not belonging, to the mythic U.S. melting pot. We will explore Latin@ literature primarily from the last half of the previous century to contemporary writers. We will problematize the term "Latin@" in terms of race, ethnicity, country of origin, and cultural variables. Furthermore, the unease of belonging to neither the locus of the U.S. nor to the country/culture of origin/ancestry will be further explored in light of other marks of identity difference, including race, gender, sexuality, religion, and class. The difficulty of finding an identity, a locus, and the various modes of adaptation and adoption will be explored through the literary production of Latinos trying to articulate the state of (not) belonging for themselves as well as to give voice to their community. While the course will strive to give an historical perspective to the issues at hand, our focus will be more on the literary production of the 20th/21st centuries, when Latin@ literature blossomed in the context of Civil Rights and the social upheavals of the mid century. Knowledge of Spanish not required. Course is taught IN ENGLISH.
Prerequisite: Successful completion of ENG 111 and 112 with grade of C or better, or equivalent.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: occasionally.

SPA 346 Short Term Study Abroad Language Course **1-3 Credits**
Short term (summer, usually, or occasionally during January break) study abroad language course run by the Modern Languages, Literatures, and Cultures faculty. Students with various levels of language skills can be accommodated. Locations include Costa Rica, Mexico, Argentina, Cuba, and Spain. Consult with DMLLC faculty for specific information in any given year, including specific course fees. Fulfills DMLLC Study Abroad requirement. Participation must be approved by the chair. Homestays are offered in some countries. Excursions frequently included. Open to all majors, though occasionally some programs will require intermediate or better Spanish language skills --consult with instructor leading the program and/or the chair.
Prerequisite: Some Spanish classwork preferred: completion of SPA 215 with grade of C or better, though lower levels of Spanish may also be considered if academically strong and mature student.
Offered: occasionally.

SPA 348 Short Term Study Abroad Culture Course or Internship **1-3 Credits**
Short term (summer, usually, or occasionally during January break) study abroad course run by the Modern Languages, Literatures, and Cultures faculty. Locations include Costa Rica, Mexico, Argentina, Cuba, and Spain. Course may involve culture related coursework, an internship, or service learning. Consult with DMLLC faculty for specific information in any given year, including specific course fees. All work in Spanish, although students with various levels of language skills can be accommodated. Fulfills DMLLC Study Abroad requirement. Participation must be approved by the chair. Homestays are offered in some countries. Excursions frequently included. Open to all majors though occasionally some programs will require intermediate or better Spanish language skills --consult with instructor leading the program and/or the chair.
Prerequisite: Some Spanish classwork preferred: completion of SPA 215 with grade of C or better, though lower levels of Spanish may also be considered if academically strong and mature student.
Offered: occasionally.

SPA 399 Seminar in Argentina **3 Credits**
Offered exclusively in Argentina during Winter Break for 3 weeks. Open to all majors in need of 100, 200, 300 or 400-level SPA courses. Satisfies the Study Abroad Requirement.
Prerequisite: A minimum grade of C in SPA 215 or permission of instructor.
Offered: occasionally during winter break, currently anticipated winter 2020.

SPA 400 Spanish Internship **1-3 Credits**
Professional Internship. Open to ALL majors, though intermediate Spanish knowledge expected. Internships require an application and approval by the associate dean.
Prerequisite: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324. Or, permission of the department chair & associate dean.

SPA 405 Spanish Literary Myths **3 Credits**
A focus on the construction of three Spanish and French literary myths: Don Quixote, Don Juan and Carmen. Students will study its original sources, development, transformation, and historic interpretation, as well as its contemporary versions based on literature, visual arts and music. Exclusive use of Spanish in class.
Prerequisites: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324. Or, permission of the department chair.
Offered: spring 2019.

SPA 410 Finding Your Way: The Camino Pilgrimage **1 Credit**
The El Camino study tour is a 10-day walk following one of the oldest medieval pilgrimage routes to St. James Cathedral in Santiago de Compostela, located in the Northeast part of Spain. Santiago de Compostela is a legendary burial place of St. James, venerated by Christians around the world. Participants of the trip will be exposed to the history, politics, and culture that contributed to the construction of the legendary pilgrimage and will be able to place it in a contemporary, European context. The tour is preceded by a series of lectures, readings and film sessions, and a rigorous physical preparation for the 100+kilometers journey needed to obtain an official certificate of the pilgrim. Please note that there is an additional fee for travel. Students should contact the instructor to determine the fee.
Restrictions: Strict selection process (including, but not limited to: physical ability to complete the walk, commitment to the values of the Camino & those of the Department of Modern Languages, Literatures, and Cultures (e.g. multiculturalism and open-mindedness).
Offered: occasionally in spring with the walk in May/June.

SPA 415 Roman, Arab and Jewish Spain: Journey in Time **1 Credit**
This study tour takes students to Southern Spain and its historic cities of Mérida, Sevilla, Córdoba, and Granada. They delve into aspects of the culture of Spain that distinguish her from other nations and geographic regions. The formation of this unique and unrepeatable identity is rooted in the historic and cultural foundations with emphasis on Roman, Arab, and Jewish Spain. The impact of these three cultures on the Iberian Peninsula marked the beginning of the formation of Spain's national identity in terms of language, religion, law, literature, architecture, infrastructure, agriculture, and gastronomy.
Prerequisite: None. **Corequisite:** None.
Offered: occasionally.

SPA 420 Personal Narrative: Understanding Reality and the Self in Contemporary Spanish Narrative. **3 Credits**
An examination of cultural themes (identities, stereotypes, customs and traditions) in the essayist work of the best contemporary Spanish writers: Lucía Extebarria, Javier Marías, Juan José Millás, Rosa Montero, Soledad Puértolas, Rosa Regás, and Manuel Vincent. Emphasis on vocabulary building and idiomatic structure of the language. Exclusive use of Spanish in class.
Prerequisites: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324. Or, permission of the department chair.
Offered: occasionally in spring.

SPA 436 Detective Fiction: Murderous Seduction **3 Credits**
Explores the detective novel and film in Spain and Latin America focusing on socio-political interpretations & cultural contexts, the characteristics of the genre, motivations for writing/reading such fiction, and the classification of this fiction as low/high-brow. We will also explore the deconstruction of the genre and the detective novel as self-parody. Exclusive use of Spanish in class.
Prerequisites: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324. Or, permission of the department chair.
Offered: occasionally in fall.

SPA 453 Almodóvar and La Movida: The Films of Pedro Almodóvar **3 Credits**
Exploration of the transgressive, revolutionary, titillating films of Pedro Almodóvar and the birth of a new Spain after the death of Franco, tracing the trajectory and development of his cinematic narrative technique from his earliest films to his more recent films, exploring the excoriation of class, gender, sexuality, politics, and identity in his oeuvre. Exclusive use of Spanish in class.
Prerequisites: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324. Or, permission of the department chair.
Offered: occasionally in fall.

SPA 455 Spanish Short Fiction **3 Credits**
A study of Spanish short-short literary fiction, Almodóvar's cinematography and graffiti art as expressions of Postmodern high and low cultures. Exclusive use of Spanish in class.
Prerequisites: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324, or permission of the department chair.
Offered: occasionally in spring.

SPA 456 Cuban Cinema of the Revolution **3 Credits**
This course explores how film is politically charged in Cuba. How do directors work around and within the Cuban government's censorship to critique the Revolution as well as balance that critique with a love for the country and its people? Addresses how countryside and Havana are not just architecture or geography, but characters in their own right. Explores issues of race, gender, sexuality, class, and religion within Cuba and the exile community. No prerequisite for non SPA credit. Exclusive use of Spanish in class (exceptions can be made for those going on the trip, upon consultation with instructor and approval of chair).
Prerequisites: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324, or permission of the department chair.
Offered: occasionally.

SPA 457 Cuba Immersion Experience **3 Credits**
Delving deep into the history, culture, economics, and politics of Cuba, this course explores the complex character of the largest Caribbean island, and its complicated relationship to the US. This course is a follow up to SPA 456: Cuban Cinema of the Revolution. Students should take SPA 456, though some exceptions may be made at the discretion of instructor. The course runs three weeks in Havana and the provinces in late December through first weeks of January. Course will include site visits, lectures and visits on history, politics, society, medicine, gender and sexuality, labor, religion, and education. Home stays included.
Prerequisites: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324, or permission of Chair.
Offered: occasionally.

SPA 459 The Body Erotic/The Body Politic: Sexuality as Political Discourse in Latin America and Spain **3 Credits**
Explores how 'deviant' sexuality (homosexuality, lesbianism, incest, and miscegenation) are used as political discourse in contexts where political dialogue is restricted. Examines how art deals with issues of the sexual body in terms of the political body, exploring the political uses of the body as well as the sexualization of the political. Exclusive use of Spanish in class.
Prerequisites: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324. Or, permission of the department chair.
Offered: occasionally in fall.

SPA 460 Lorca and his Époque **3 Credits**
An examination of Spain's Generation of '27 as a cultural vanguard of the 20th century. Emphasis on multidisciplinary oeuvre by Federico García Lorca and his closest circle of friends: Salvador Dalí, Luis Buñuel and Manuel de Falla. Exclusive use of Spanish in class.
Prerequisites: minimum grade of C in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324; or permission of chair/instructor.
Offered: occasionally in spring.

SPA 490 Spanish Capstone Portfolio Project **1 Credit**
Graduating majors will collect a portfolio of their work during their time at Canisius. Students will summarize their experience of studying Spanish through a 5-10 page reflective paper (written in the target language) discussing the progress they have made in skills (reading, writing, speaking, listening) and knowledge (culture). Students will also summarize how their knowledge of Spanish will impact their futures (graduate school, year of service, career, community, personal life). In this reflection, students should also synthesize the three areas of extracurricular experience and their impact on their skills and cultural knowledge: A) Study Abroad; B) Service Learning, Internships/Volunteer sites; C) Cultural Activities. Students should also critique the program, and suggest improvements to curriculum. The final project will conclude with an oral presentation of the above, with Q&A, for peers and faculty. This course will be required of all graduating majors entering AY 17/18 (graduation 2021 and later). Current students are strongly encouraged to register.
Prerequisite: successful completion of all other requirements in the major (may be concurrently registered in final elective).
Offered: every fall and spring semester.

SPA 499 Independent Study **1-6 Credits**
Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.
Prerequisites: C or better in SPA 217 or SPA 332, and C or better in SPA 323 or SPA 324. Or, permission of the department chair.

Philosophy (BA)

Chair: Philip Reed, PhD

Introduction

Philosophy probes into some of the deepest questions of human life. What is the nature of reality? What is truth? What is happiness? What is justice? The philosophy curriculum explores these — and many other — fundamental questions and helps students to formulate reasonable answers to these questions.

A Cornerstone of Jesuit Education

Philosophy has been a cornerstone of Jesuit education since the founding of the first Jesuit colleges and universities in 17th century Europe. Educators at Jesuit colleges and universities in the United States continue to recognize the special province of philosophy to: Embrace our human powers to think abstractly and thus to cultivate models of mental discipline and to broaden our capacities to understand and to enjoy living. Raise critical questions and use reasoned argumentation to develop normative standards for guiding a person's relationship to his/her community. Promote reasoning about human nature and human values to help provide bridges between religious belief and contemporary intellectual directions. Value integrity, commitment to truth, excellence and understanding with an aim to enhance our expressive powers, our knowledge, foresight and sense of direction. Philosophy is an especially ennobling discipline since it elevates what is common in being human while also nurturing individuality and self-esteem. Studying philosophy helps to cultivate responsible citizenship by promoting thoughtful reflection on contemporary cultural and intellectual currents, by critically assessing the discourse of public officials, and by identifying unfounded assertions and biased opinions with an aim to replace them with responsibly reasoned argumentation. Consequently, philosophy holds a special place in a liberal arts curriculum at a Jesuit college or university just in its capacity to objectify the human condition and to contribute to our becoming more fully human.

Department Mission

To fulfill its Ignatian mission, the Philosophy faculty provides programs of instruction to cultivate an abiding sense of responsibility as men and women for and with others by focusing on the service of faith and the promotion of justice. The faculty considers it crucially important that a good education addressing such concerns has a firm foundation in the history of philosophy and its principal branches, and the issues of moral philosophy, together with special attention to examining argumentation. Equally important is the Philosophy faculty's interest cultivating discussion about the notions of the common good and social justice. For more information, please visit our Philosophy department website (https://www.canisius.edu/academics/programs/philosophy/).

Qualifications

Students must maintain an overall 2.0 GPA in their undergraduate studies and a 2.0 average in their philosophy program to graduate with a degree in Philosophy.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Curricular Components of a Philosophy Major

Students desiring to major in philosophy might have scholarly interests to pursue graduate study in philosophy or to acquire competence in philosophy for a diversity of reasons including advanced study in other disciplines. To help students satisfy these interests, the Philosophy faculty offers a major program that maintains intellectual and academic rigor while promoting the mission to educate for others with attention to the principle of *cura personalis*. The curriculum combines a historical, a topic, and a fields approach to construct a unified program of instruction. Since our mission emphasizes concern with critical examination of values and principles of ethics and justice, the major curriculum requires one course in study and analysis of argumentation and two courses in the study of ethics, one of which is theoretical.

Supplemental Study

The Philosophy faculty encourages each philosophy major to supplement his/her course of study by taking advantage of the large number of free electives available. We recommend that students advance their study of classical and modern languages, and to complement their history of philosophy sequence with appropriate history courses. There is a wide array of fine liberal arts courses in the various departments of the College of Arts and Sciences. Philosophy requires a breadth of knowledge in many disciplines.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Co-Curricular Activities

The Philosophy faculty encourages majors and minors to participate in the on-going activities of the Department. Students are invited to the regular colloquia at which faculty present their current research. Students are invited to make presentations to try out the results of their research. In addition there are the Philosophy Club and the Philosophy Honors Society, Phi Sigma Tau.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
PHI 225	Logic	3
PHI 300	History of Philosophy I	3
PHI 310	History of Philosophy II	3
Ethical Theory - Select one of the following:		3
PHI 240	Justice	
PHI 241	Ethics: Traditions in Moral Reasoning	
PHI 252	Happiness, Virtue and the Good Life	
PHI 261	Philosophy of Law	
Applied Ethics - Select one of the following:		3
PHI 242	Ethical Issues in Business	
PHI 243	Bio-Medical Ethics	
PHI 244	Environmental Ethics	
PHI 245	Animal Ethics	
PHI 246	Ethics of Technology	
PHI 247	Food and Agricultural Ethics	
Philosophy Elective		3
Philosophy Elective		3
Philosophy Elective		3
Philosophy Elective at the 400 level		3
PHI 390	Systematic Seminar	3
Total Credits		30

Students who intend to study philosophy in graduate school are strongly encouraged to take PHI 451.

Roadmap

Recommended Semester Schedule for Major Course Requirements

The following four-year schedule maps out a course of study that a philosophy major may pursue. However, this schedule is provided only to suggest one way among many that a student might design his/her program of undergraduate philosophy study.

Freshman	
Fall	**Spring**
PHI 101	PHI Elective
Sophomore	
Fall	**Spring**
PHI 225	PHI Applied Ethics
PHI Ethics Theory	PHI Elective
Junior	
Fall	**Spring**
PHI 300	PHI 310
PHI Elective	
Senior	
Fall	**Spring**
PHI 390	PHI 400 Elective
	PHI 451 (optional, but strongly recommended for students planning to attend graduate school in philosophy)

Learning Goals & Objectives

Student Learning Goal 1

Majors will acquire a broad knowledge of major figures, branches, and terminologies in Western philosophy.

- **Objective A**: Demonstrate knowledge of major figures in Western Philosophy.
- **Objective B**: Demonstrate knowledge of major branches in Western Philosophy.
- **Objective C:** Demonstrate knowledge of terminology particular to a branch or tradition within philosophy.

Student Learning Goal 2

Majors will develop a capacity for communicating philosophical ideas and arguments.

- **Objective A:** Write cogent prose to communicate philosophical ideas effectively.
- **Objective B**: Construct philosophical arguments.

Student Learning Goal 3

Majors will develop a capacity for thinking critically and for effectively assessing arguments.

- **Objective A**: Analyze arguments in philosophical discourse.
- **Objective B:** Identify underlying presuppositions of a philosopher's argumentative discourse.
- **Objective C**: Raise questions and frame philosophical problems introduced by texts.

Student Learning Goal 4

Majors will become information literate as this applies to philosophical study and research.

- **Objective A**: Cite properly and work effectively with both primary and secondary sources.

Minor

Curriculum Requirements for a Philosophy Minor

A minor in philosophy consists of five (5) courses beyond PHI 101 that might complement another major or provide personal intellectual satisfaction.

Code	Title	Credits
PHI 300	History of Philosophy I	3
PHI 310	History of Philosophy II	3
Philosophy Elective		3
Philosophy Elective		3
Philosophy Elective		3
Total Credits		15

Courses

PHI 101 Introduction to Philosophy **3 Credits**
Core Curriculum Foundation Course. A study of the major eras in the history of philosophy: Ancient, Medieval, Modern, and Contemporary and also of principal branches in philosophy: Aesthetics, Epistemology, Theories of Ethics, Logic, Metaphysics, and Theories of Justice. Students study the Catholic/Jesuit tradition and become able to identify the elements of rational argumentation. PHI 101 is a prerequisite for PHI 200 courses.

PHI 211 Philosophy of Religion **3 Credits**
A study of principal contemporary and classical discussions about the existence and nature of God, God's relationship to the world, the individual and society.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Global Awareness

PHI 225 Logic **3 Credits**
An introductory study of logic treating such topics as: deduction, techniques for evaluating reasoning, language and meaning, various formal and informal fallacies, and the notion of implication.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy)

PHI 240 Justice **3 Credits**
A study of enduring questions such as: What does it take to be a just person and to create a just society? Includes investigations of (1) theories of justice and (2) problems of justice relating to injustice and oppression due to race, class, species, and gender.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice

PHI 241 Ethics: Traditions in Moral Reasoning **3 Credits**
A survey of principal traditions in moral reasoning with attention to moral principles inclusive of utility, deontology and virtue, and their applications to contemporary social realities.
Prerequisite: PHI 101.
Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 242 Ethical Issues in Business **3 Credits**
study of important concerns in business and market realities with special concern to applying moral principles in decision making.
Prerequisite: PHI 101.
Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 243 Bio-Medical Ethics **3 Credits**
A study of important moral issues in relation to current concerns in medicine, medical technology, and the life sciences.
Prerequisite: PHI 101.
Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 244 Environmental Ethics **3 Credits**
A study of classical and contemporary moral theories concerning the relationship of human beings to the manifold of their natural surroundings.
Prerequisite: PHI 101.
Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 245 Animal Ethics **3 Credits**
What do we mean by classifying together all non-human animals as 'animals'? This course critically examines the traditional notion that animals are commodities or resources for human use. It questions whether all sentient beings have intrinsic value and should be respected and what form that 'respect' should take.
Prerequisite: PHI 101.
Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 246 Ethics of Technology **3 Credits**
A study of how prominent technologies such as television, cellular phones, and medical breakthroughs affect individual persons and our society, and in what ways technological innovations make us better or worse.
Prerequisite: PHI 101.
Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 247 Food and Agricultural Ethics **3 Credits**
A study of the moral implications of the current food system in connection with the production, distribution, and consumption of food and aims to examine what might constitute a reasonable position regarding the ethics of what we eat and what each of us can do to help bring about a more just food system.
Prerequisite: PHI 101
Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 252 Happiness, Virtue and the Good Life **3 Credits**
A study of the role of virtue and vice in the moral life, how they emerge from developments of personal character and relate to meaningful human happiness, fulfillment, and the good life.
Prerequisite: PHI 101.
Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 258 Minor Service **0 Credits**
Required course for specific minors. This course requires 20 hours of direct service. Students pursuing the ethics minor will register for 258E and students pursuing the justice minor will register for 258J.
Offered: every fall & spring.

PHI 261 Philosophy of Law **3 Credits**
A study of the nature, sources and sanctions of law and legal theory, treating concerns of legal positivism, natural law theory, rights and justice, and the relationship between law and morality.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice

PHI 264 Justice & the Environment: The Problem of Climate Change **3 Credits**
An examination of differing views of justice and their impact on environmental action with special focus on the issue of climate change.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice

PHI 267 Faith, Reason, and Justice Catholic Social Thought **3 Credits**
A study of the philosophical foundations of Catholic social teaching, articulated from the time of Pope Leo XIII through present day, and those features that make it unique, both as compared to other contemporary accounts of justice and in identifying and rectifying current injustices.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice
Offered: occasionally.

PHI 271 Philosophy of Human Rights **3 Credits**
A study of various issues of human rights in global perspective to ask if human rights transcend political orders, whether they are universally applicable to all human beings, or determined to be culturally relative.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice

PHI 272 Gender and Philosophy **3 Credits**
An investigation into feminist theories that analyzes the role that gender plays in society and in the formation of the masculine and feminine subjects; an examination of notions of power, structure and work; and gender as performance and representation.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice

PHI 273 Race and Philosophy **3 Credits**
A study of philosophical assumptions underlying concepts of race that treats designations of racial identities, the political effects of racial classification, the ethics of race and the metaphysical legitimacy and social reality of racial designations.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice

PHI 274 Social and Political Philosophy **3 Credits**
A study of foundational philosophical theories on how to organize the collective and social life of individual human beings, examining justifications for state authority, establishing citizen's rights and allocating resources for human well-being.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice

PHI 275 Global Feminisms **3 Credits**
This course studies feminist philosophy and feminist theories of justice in global contexts, including Indigenous America, Latin America, Africa, and Asia. This course will compare feminist theory from Western contexts (European and American) with its global counterparts, with special focus on the way gender, sex, and sexuality operate differently in different global contexts.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice
Offered: occasionally.

PHI 285 Black Philosophy **3 Credits**
A study of philosophical trends within the black diaspora with attention to the contributions of prominent black philosophers and social activists.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice
Offered: occasionally.

PHI 286 Latin American Philosophy **3 Credits**
A study of the various philosophical movements in Latin America with a focus on the way of practicing philosophy that is rooted in the lived reality of Latin American peoples.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy), Justice

PHI 291 Philosophy of Art **3 Credits**
A study of various approaches to thinking philosophically about art and covering the history of aesthetics with special emphasis on contemporary arts including film and music.
Prerequisite: PHI 101.
Fulfills College Core: Field 2 (Philosophy)

PHI 292 Philosophy of Beauty **3 Credits**
A study of various approaches to thinking philosophically about beauty and covering the concept in the history of aesthetics with special emphasis on the problems of beauty in contemporary culture.
Prerequisite: PHI 101.
Fulfills College Core: Diversity, Field 2 (Philosophy)

PHI 300 History of Philosophy I **3 Credits**
This course covers major figures and movements in western philosophy in the ancient, medieval and early modern periods. Students will be introduced to major figures such as Plato, Aristotle, Augustine, Aquinas, Descartes, Hume and Kant.
Prerequisite: PHI 101 and one Field 2 course.
Offered: fall.

PHI 310 History of Philosophy II **3 Credits**
A course that covers major figures and movements in western philosophy from the 19th to the 21st Century. Movements include German Idealism, Marxism, Utilitarianism, and Phenomenology. The course then considers developments in Continental and Anglo-American traditions.

PHI 379 Contemporary Women Philosophers **3 Credits**
A study of the thinking of important women philosophers of the 20th century with special concern to address their responses to the enduring questions of ethics, especially for modern times.
Prerequisite: PHI 101.

PHI 390 Systematic Seminar **3 Credits**
Seminar focused on teaching, readings, and writing that fosters student ability to recognize, analyze,evaluate, and write philosophical arguments. Specific course topics vary by semester.
Offered: fall only.

PHI 398 The City and the Good Life **3 Credits**
This course examines how the ways we build cities and other places can influence the quality of our lives. What kinds of cities can best promote justice and enable human flourishing?
Restriction: seniors only. Fulfills College Core: Core Capstone.
Fulfills College Core: Core Capstone
Offered: Occasionally.

PHI 399 Ethics, Justice, & the Problem of Poverty **3 Credits**
This is a Core Capstone course; students from all majors are welcome. The first half of the course focuses on ethics, justice, and diversity. The second half of the course is focused on economics and global awareness vis-à-vis the problem of poverty.
Prerequisite: PHI 101.
Fulfills College Core: Core Capstone

PHI 401 Topics in Philosophy **3 Credits**
A seminar style course offered by faculty in the Department of Philosophy on a rotating basis and focusing on a different topic each time it is offered. Check with the department to find out what will be offered in any given academic year.
Prerequisite: PHI 101

PHI 451 Senior Thesis **3 Credits**
An Ignatian Scholar successfully completes a senior thesis. This is a culminating experience in which a student expresses mature habits of self-directed study and critical analysis, with an ability to integrate knowledge beyond the expectations of a seminar paper. A senior thesis addresses a select philosophic topic and is especially concerned with philosophic argumentation. An Ignatian Scholar demonstrates ability to exercise appropriate research methods, to provide critical assessment of issues, to assess theoretical presuppositions underlying a discourse and to advance well-constructed argumentation. A senior thesis ought to exhibit the values of the department mission.
Prerequisite: PHI 101 & at least two 300-level philosophy courses.

PHI 499 Independent Study **1-3 Credits**
A tutorial style course on a topic approved by the department and agreed upon between the student and a professor. Independent studies require an application and approval by the associate dean.
Prerequisite: PHI 101 & at least two 300-level philosophy courses.

Physics (BS and BA Options Available)

Chair: Michael Wood **(**wood5@canisius.edu**), PhD.** (Research Website **(**https://sites.google.com/site/cmenpgroup/**))**

Introduction

The Canisius College Physics major provides a strong background in the scientific skills of analysis and experimentation and gives students a broad choice of career opportunities. The Physics major is a preparation for further study in graduate physics and related areas such as oceanography, geophysics, patent law, medicine, engineering and astronomy and entry into research and development employment. The specific goal for majors is a thorough knowledge of basic physical science and the mathematical and experimental application of this basis to the study of natural phenomena. Other offerings are intended to give non-majors an appreciation of the relation between science and the world within which they live.

Our department offers a number of degree tracks to match with the students' interests and career goals.

- Bachelor's of Science (BS) in Physics (p. 211) - curriculum is designed to prepare the student for graduate school in physics, engineering, or a related scientific field.
- Bachelor's of Arts (BA) in Physics (p. 212) - curriculum is designed to cover the major topics in the Physics BS program with fewer requirements. This degree is optimal for students interested in a different career path such as teaching in secondary education, law, medicine, journalism, etc. The Physics BA is not meant as preparation for graduate school in physics or engineering. Curriculum easily allows for double majoring.
- Dual Degree Engineering Program (3+2 Physics/Engineering) (p. 220) - the student spends 3 years studying Physics at Canisius College and the next 2 years in the Engineering Program at the University at Buffalo or Pennsylvania State University at Erie. At the end of the 5 years, the student will receive a Physics degree from Canisius College and a Engineering degree from the other school.
- Pre-engineering Program (2+2) (p. 219) - the students spend their first 2 years at Canisius College taking the introductory physics, mathematics, and engineering courses. After transferring to the engineering school of their choice, they complete their engineering

degree after the third and fourth years. This is a transfer program, and they are not awarded a degree from Canisius College.

- Dual Degree of Physics (Bachelor's) and Education (Master's) (p. 216) - Canisius College is now offering dual Bachelor of Arts degree in Physics and Master's Degree in Education who wish to add teacher certification. The Physics BA (p. 212) requirements are unchanged, but students are counseled to add certain education courses as electives during the undergraduate years so they are prepared to pursue both Adolescence Education 7-12 certification in their content area and Adolescence 7-12 Teaching Students with Disabilities Generalist.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Physics website (https://www.canisius.edu/academics/programs/physics/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Physics. For admission to the advanced program (Junior/Senior level), a student must have completed, with a grade of at least C, General Physics (PHY 223, PHY 224, PHY 225) and Mathematics through Differential Equations (MAT 222). To qualify for graduation with a degree in Physics, a grade of C- or higher is required in PHY 225, PHY 226, and all 300- and 400-level Physics courses. Students are expected to be prepared to take Calculus 1 (MAT 111) their first semester at Canisius.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Advising is particularly important for Physics majors due to the highly structured curriculum and numerous course prerequisites.

Major Experiences

Physics majors use modern physics equipment like a 3D printer, lasers, X-ray florescence, a multi-channel nuclear spectrometer, various radiation detectors, and an X-ray spectrometer. They have access to departmental computers. In addition, a large supply of other equipment is available for students to use as early as their first semester. In addition to the standard physics major, students may also wish to consider the Dual Degree Engineering Program, which offers students the option of completing a Physics Degree at Canisius and an Engineering degree at University at Buffalo (UB) or Pennsylvania State University at Erie. For those interested in Physics teaching, a Physics Education program is offered in conjunction with the education department. The Physics Club offers opportunities for social activities, technical tours, lectures and other activities.

The faculty in the department are active in research in the fields of experimental nuclear physics, robotics, physics education, and computational science. Students frequently join with a professor on his or her respective projects and perform a variety of research tasks. Students gain skills in large-scale computation, data analysis, electronics, and detector assembly and testing. In many cases, the research is interdisciplinary with the student working with a physics professor and a faculty member in the Mathematics (p. 190), Computer Science (p. 125), and Digital Media Arts (p. 134) Departments. Routinely, students present posters at local, statewide, and national conferences. Past students have conducting research through the National Science Foundation's Research Experience for Undergraduates at institutions such as University of Rochester, University of Notre Dame, and Baylor University.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Double majors in Physics BS (p. 211) and Computer Science (p. 125), or Physics BS (p. 211) and Mathematics (p. 190) are common and offer interesting career options. The Physics BA (p. 212) can be combined with almost any other program at the college.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

The Physics minor is particularly popular when combined with majors in Chemistry (p. 103), Mathematics (p. 190), or Computer Science (p. 125).

Curriculum

Curriculum Requirements for a BS in Physics

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
PHY 104	Seminar for Physics and Pre-engineering Majors	0
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory	4
PHY 226 & 226L	Basic Electronics and Basic Electronics Laboratory	4
PHY 330	Electrodynamics I	3
PHY 331	Electrodynamics II	3
PHY 332	Statistical and Thermal Physics	3
PHY 335	Mathematical Analysis for Physicists	4
PHY 350 & PHY 351	Modern Physics Laboratory and Advanced Laboratory	2
PHY 443	Classical Mechanics	3
PHY 445	Special Topics in Physics	1
PHY 446	Quantum Mechanics I	4
PHY 447	Quantum Mechanics II	3
PHY 498	Senior Project	1-3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
MAT 111 & MAT 112	Calculus I and Calculus II	8
MAT 211	Calculus III	4
MAT 222	Differential Equations	3
Science elective (Science Elective to be chosen from BIO 111, CHM 112, CSC 112, MAT 219 or MAT 351)		3-4
Total Credits		69-72

Major Electives

Computer Science (p. 125) and Mathematics (p. 190) courses are highly recommended, particularly linear algebra.

Difference with the Physics BA Degree

The Physics BS degree program is designed to prepare the students for graduate school in Physics, Engineering, or a related scientific field. Therefore, it has more major course requirements than the Physics BA degree. The first 2 years of both programs are identical. The Physics BS degree requires more major courses in the third and fourth years in order to provide more depth or knowledge and experience. The student is advised to consult the BS and BA Roadmaps for the specific differences.

Additional Course Considerations

Courses in the Junior and Senior years rotate on a two year basis. Please consult your advisor about which set of courses is available in any given year.

Note: Course availability may be a factor in determining time to degree completion for transfer students. Discussion with department faculty is highly recommended for transfer students.

Roadmap

Recommended Semester Schedule for Major Course Requirements for a BS in Physics

Freshman	
Fall	**Spring**
MAT 111	MAT 112
PHY 104	PHY 104
PHY 223 & 223L	PHY 224 & 224L
CSC 111 & 111L	
Sophomore	
Fall	**Spring**
MAT 211	MAT 222
PHY 104	PHY 104
PHY 225 & 225L	PHY 226 & 226L
CHM 111 & 111L	Science Elective[1]
Junior	
Fall	**Spring**
PHY 104	PHY 104
PHY 330	PHY 331
PHY 335	PHY 351
PHY 350	
Senior	
Fall	**Spring**
PHY 104	PHY 104
PHY 446	PHY 332
PHY 443	PHY 445
	PHY 447
	PHY 498

1 Science Elective to be chosen from BIO 111, CHM 112, CSC 112, MAT 219 or MAT 351. The science elective may be taken in a subsequent semester if it requires a prerequisite. In this case, take a course in the Core Curriculum in the spring semester of the freshman year.

Curriculum

Curriculum Requirements for a BA in Physics

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
PHY 104	Seminar for Physics and Pre-engineering Majors	0
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory	4
PHY 226 & 226L	Basic Electronics and Basic Electronics Laboratory	4
PHY 350	Modern Physics Laboratory	1
or PHY 351	Advanced Laboratory	
PHY 445	Special Topics in Physics	1
PHY 498	Senior Project	1-3
Choose 4 of the following upper division courses		12-14
PHY 330	Electrodynamics I	
PHY 331	Electrodynamics II	
PHY 332	Statistical and Thermal Physics	
PHY 335	Mathematical Analysis for Physicists	
PHY 443	Classical Mechanics	
PHY 446	Quantum Mechanics I	
PHY 447	Quantum Mechanics II	
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 222	Differential Equations	3
Science Elective (choose one of the following):		4
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	
CSC 112 & 112L	Data Structures and Data Structures Laboratory	
MAT 219	Linear Algebra	
MAT 351	Probability & Statistics I	
Total Credits		58-62

Major Electives

Computer Science (p. 125) and Mathematics (p. 190) courses are highly recommended, particularly linear algebra.

Difference with the Physics BS Degree

The Physics BA degree program is designed to provide the basic topics in the field of physics and the tools to apply mathematical and scientific skills to different disciplines. **This program is not a preparation for graduate school in physics or engineering**. The program does provide the students with the freedom to explore other programs like education, journalism, pre-law, pre-medicine, and finance, to name a few. **The Physics BA is easier to double major than the Physics BS**. Therefore, it has fewer major course requirements than the Physics BS degree. The first 2 years of both programs are identical. The Physics BA degree requires fewer major courses in the third and fourth years to allow the students to take a variety of electives and try different fields. The student is advised to consult the BS and BA Roadmaps for the specific differences.

Additional Course Considerations

Courses in the Junior and Senior years rotate on a two year basis. Please consult your advisor about which set of courses is available in any given year.

Note: Course availability may be a factor in determining time to degree completion for transfer students. Discussion with department faculty is highly recommended for transfer students.

Roadmap

Recommended Semester Schedule for Major Course Requirements for a BA in Physics

Freshman	
Fall	**Spring**
MAT 111	MAT 112
PHY 104	PHY 104
PHY 223 & 223L	PHY 224 & 224L
CSC 111 & 111L	
Sophomore	
Fall	**Spring**
MAT 211	MAT 222
PHY 104	PHY 104
PHY 225 & 225L	PHY 226 & 226L
CHM 111 & 111L	Science Electvie[1]
Junior	
Fall	**Spring**
PHY 104	PHY 104
PHY 350	PHY 351 (if did not take PHY 350)
PHY elective[2]	PHY elective[2]
Senior	
Fall	**Spring**
PHY 104	PHY 104
PHY elective[2]	PHY 445

	PHY 498
	PHY elective[2]

1 Science Elective to be chosen from BIO 111, CHM 112, CSC 112, MAT 219 or MAT 351. The science elective may be taken in a subsequent semester if it requires a prerequisite. In this case, take a course in the Core Curriculum in the spring semester of the freshman year.

2 Choice of upper division courses: PHY 330, PHY 331, PHY 332, PHY 335, PHY 443, PHY 446, and PHY 447

Minor

The physics minor requires seven courses, which are to be distributed as follows.

Code	Title	Credits
Four Required Courses:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory	4
MAT 211	Calculus III	4
Select three courses from the following two groups. At least one of these three must be selected from Group I:		8-12
Group I:		
PHY 330	Electrodynamics I [1,3]	
PHY 331	Electrodynamics II [1]	
PHY 332	Statistical and Thermal Physics [5]	
PHY 443	Classical Mechanics [4]	
PHY 446	Quantum Mechanics I [2]	
Group II:		
PHY 226	Basic Electronics	
Two lab credits from the following: PHY 350, PHY 351, PHY 445		
MAT 222	Differential Equations	
PHY 335	Mathematical Analysis for Physicists	
PHY 447	Quantum Mechanics II	
CHM 301 & 301L	Fundamental Physical Chemistry and Fundamental Physical Chemistry Laboratory	
Total Credits		24-28

1 PHY 331 requires PHY 330 as a prerequisite.

2 PHY 446 is required for PHY 447.

3 PHY 335 is highly recommended as a co-requisite for PHY 330.

4 PHY 443 requires MAT 222 as a prerequisite.

5 If CHM 301 is used for Group II, PHY 332 cannot be used for Group I.

Note: MAT 111 and MAT 112 are prerequisites for one or more of the courses listed above. The Physics minor is particularly popular when combined with majors in Chemistry, Mathematics, or Computer Science.

Courses

PHY 104 Seminar for Physics and Pre-engineering Majors **0 Credits**
A key aspect of science is the communication of ideas. The seminar is one method of sharing scientific ideas and results. This course gathers Physics and Pre-engineering majors to learn about advances in their respective fields, about related careers, and about the research performed by the department faculty.
Prerequisite: None. **Corequisite:** None.
Offered: every fall & spring.

PHY 129 Introduction to Astronomy **3 Credits**
Understanding modern astronomy by using ideas from basic physics. Mathematics minimized. Naming and viewing stars and constellations is included.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: once a year.

PHY 130 Introductory Geology **3 Credits**
For science and non-science majors alike, this course covers the fundamental concepts of physical geology, including the rock cycle; erosion; tectonic processes including earthquakes and volcanism; the importance of water from oceans to rivers to glaciers; and society's dependence on energy and mineral resources from the Earth. Our planet is an interacting system of matter and energy, giving us mountains, lowlands, oceans, rivers, earthquakes, volcanoes, and the resources we need for human prosperity.
Offered: occasionally.

PHY 131 Earthquakes: Seismology and Society **3 Credits**
The science behind earthquakes: causes, locations, frequency and measurement; affects on geography, human structures and society.
Fulfills College Core: Field 6 (Natural Sciences), Global Awareness
Offered: once a year.

PHY 201 College Physics I **3 Credits**
College Physics for biological-science students. Mechanics of rigid bodies, mechanics of fluids, thermal energy and thermodynamics.
Prerequisite: MAT 110 or MAT 111. **Corequisite:** PHY 201L.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: every fall.

PHY 201L College Physics I Laboratory **1 Credit**
Laboratory for College Physics I for biological-science students.
Prerequisite: MAT 110 or MAT 111. **Corequisite:** PHY 201.
Offered: every fall.

PHY 202 College Physics II **3 Credits**
College Physics for biological-science students. Electricity and magnetism, geometrical and physical optics.
Prerequisite: minimum grade of C- in PHY 201 and 201L. **Corequisite:** PHY 202L.
Offered: spring.

PHY 202L College Physics II Laboratory **1 Credit**
Laboratory for College Physics II for biological-science students.
Prerequisite: min grade of C- in PHY 201 and 201L **Corequisite:** PHY 202.
Offered: spring.

PHY 223 General Physics for Physical Science Majors I **3 Credits**
Calculus-based general physics. Mechanics of rigid bodies.
Prerequisite: MAT 110 or MAT 111. **Corequisite:** PHY 223L.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: every fall.

PHY 223L General Physics for Physical Science Majors I Laboratory **1 Credit**
Laboratory for calculus-based general physics I.
Prerequisite: MAT 110 or MAT 111 **Corequisite:** PHY 223.
Offered: every fall.

PHY 224 General Physics for Physical Science Majors II **3 Credits**
Calculus-based general physics. Electricity and magnetism,geometrical and physical optics.
Prerequisite: minimum grade of C- in PHY 223 and PHY 223L. **Corequisite:** PHY 224L.
Offered: every spring.

PHY 224L General Physics for Physical Science Majors I Laboratory **1 Credit**
Laboratory for calculus-based general physics II.
Prerequisites: min grade of C- in PHY 223 and PHY 223L **Corequisite:** PHY 224.
Offered: every spring.

PHY 225 General Physics for Physical Science Majors III **3 Credits**
Calculus-based general physics. Mechanics of fluids, mechanical waves, thermodynamics and kinetic theory, geometrical and physical optics, special theory of relativity.
Prerequisite: MAT 211 & minimum grade of C- in PHY 224. **Corequisite:** PHY 225L.
Offered: every fall.

PHY 225L General Physics for Physical Science Majors III Laboratory **1 Credit**
Laboratory for calculus-based general physics III.
Corequisite: PHY 225.
Offered: every fall.

PHY 226 Basic Electronics **3 Credits**
Circuit analysis, power supplies, semiconductor physics, operational amplifiers, digital electronics. Integrated circuit techniques. Includes laboratory work each week.
Prerequisite: minimum grade of C- in PHY 224. **Corequisite:** PHY 226L.
Offered: spring.

PHY 226L Basic Electronics Laboratory **1 Credit**
Laboratory for basic electronics course.
Corequisite: PHY 226.
Offered: every spring.

PHY 330 Electrodynamics I **3 Credits**
Static and time-varying classical electric and magnetic fields in free-space and matter. Prior completion of or concurrent registration for PHY 335 is strongly encouraged.
Prerequisite: PHY 224.
Offered: fall of odd-numbered years.

PHY 331 Electrodynamics II **3 Credits**
Primary topic: electromagnetic waves in free-space and matter, beginning with the Maxwell equations. Additional topics: radiation and special relativity.
Prerequisite: PHY 330.
Offered: spring of even-numbered years.

PHY 332 Statistical and Thermal Physics **3 Credits**
Develops statistical concepts and methods used to relate macroscopic to microscopic descriptions of many particle systems.
Prerequisite: PHY 225.
Offered: spring of odd-numbered years.

PHY 335 Mathematical Analysis for Physicists **4 Credits**
Theory and applications of infinite series, Fourier series, Green's functions, Fourier integrals, vector calculus, linear algebra, partial differential equations, and complex variable.
Prerequisite: MAT 222 or permission of instructor.
Offered: fall of odd-numbered years.

PHY 350 Modern Physics Laboratory **1 Credit**
This course covers the basic principles of 20th century modern physics. The topics include blackbody radiation, particle/wave duality, x-ray diffraction, Bohr's model of the atom, quantum tunneling, and the Schrodinger equation.
Prerequisite: PHY 225.
Fulfills College Core: Advanced Writing-Intensive
Offered: every fall.

PHY 351 Advanced Laboratory **1 Credit**
This course emphasizes advanced experiments and experimental technique. Topics include, but are not restricted to, dosimetry, radiation detection, gamma-ray spectroscopy, Rutherford scattering, atomic spectroscopy, thin-film deposition, and magnetic resonance.
Prerequisite: PHY 225.
Fulfills College Core: Oral Communication
Offered: every spring.

PHY 443 Classical Mechanics **3 Credits**
One, two, and three dimensional motion of a particle, non- inertial systems, classical scattering, rigid-body motion. Lagrange and Hamilton equations, calculus of variations, oscillations.
Prerequisite: PHY 224 & MAT 222.
Offered: fall of even-numbered years.

PHY 445 Special Topics in Physics **1 Credit**
This course will cover model formation and development using archival journal articles in physics. The subject material will rotate by semester among topics such as astrophysics, quantum theory, and thermodynamics. Students will be expected to read and critique journal articles, lead discussions on journal articles, and trace the development of an area of physics through assigned readings.
Prerequisite: permission of instructor. **Restriction:** must be physics major or minor with senior standing.
Offered: spring of odd-numbered years.

PHY 446 Quantum Mechanics I **4 Credits**
Experimental basis of quantum mechanics, state functions, operators. Review of linear algebra techniques and introduction of the Dirac notation.
Corequisite: PHY 225 & MAT 222.
Offered: fall of even-numbered years.

PHY 447 Quantum Mechanics II **3 Credits**
Application of Schrodinger's equation, Hamiltonian mechanics, angular momentum, intrinsic spin, parity, and time-dependent quantum mechanics. PHY 446 is highly recommended.
Offered: spring of odd-numbered years.

PHY 449 Nuclear Physics Lab **1 Credit**
Introduction to experimental nuclear physics. Experiments study nuclear instrumentation, characteristics of radiation and nuclear spectra.
Prerequisite: PHY 446.
Fulfills College Core: Advanced Writing-Intensive
Offered: occasionally.

PHY 498 Senior Project **1-3 Credits**
A one-semester research project done under the supervision of a faculty member.
Prerequisite: permission of department chair. **Restriction:** senior standing in physics.
Offered: spring.

PHY 499 Independent Study **1-3 Credits**
An independent study with a faculty member of the Physics Department. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean. **Restriction:** permission of the chair.
Offered: fall & spring.

Introduction

The Dual Degree Program (http://catalog.canisius.edu/graduate/school-education-human-services/educator-preparation/dual-degree-content-and-msed-swd/#curriculumtext) offers a BA in Physics as well as a MSEd in Adolescence 7-12 Teaching Students with Disabilities Generalist. This dual degree program leads to Initial Adolescence Certification in Physics as well as Initial Certification in Adolescence 7-12 SWD Generalist. Since it leads to two teaching certificates, candidates must meet the content requirements for both over the course of their curriculum. In most cases, the content area major covers those requirements. In some instances New York State has additional requirements. Please note, this dual degree program can be completed in as little as 5 years if one summer is included.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Curriculum Requirements for a BA in Physics

Code	Title	Credits
PHY 104	Seminar for Physics and Pre-engineering Majors	0
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory	4
PHY 226 & 226L	Basic Electronics and Basic Electronics Laboratory	4
PHY 350	Modern Physics Laboratory	1
or PHY 351	Advanced Laboratory	
PHY 445	Special Topics in Physics	1
PHY 498	Senior Project	1-3
Choose 4 of the following upper division courses		12-14
PHY 330	Electrodynamics I	
PHY 331	Electrodynamics II	
PHY 332	Statistical and Thermal Physics	
PHY 335	Mathematical Analysis for Physicists	
PHY 443	Classical Mechanics	
PHY 446	Quantum Mechanics I	
PHY 447	Quantum Mechanics II	
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 222	Differential Equations	3
Science Elective (choose one of the following):		4
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	
CSC 112 & 112L	Data Structures and Data Structures Laboratory	
MAT 219	Linear Algebra	
MAT 351	Probability & Statistics I	
Total Credits		58-62

Curriculum Requirements for a Master's Degree in Education

The education curriculum is provided below for the MSeD portion of the dual degree programs. Notice that several foundation courses are taken at the undergraduate level intermingled with other undergraduate requirements. The graduate courses begin at the 500 level and continue until completion.

Code	Title	Credits
EDS 101	Human Growth and Social Development: Adolescence	3
EDS 223	Foundations of Adolescent Literacy	3
SPE 341	Inclusive Strategies	3
EDS 360	Evaluation and Teaching Strategies	3
EDS 360L	Teaching Strategies Lab	0
EDS 250	Foundations of Education	3
Please select one of the following:		
EDS 406	Methods of Teaching Social Studies: Adolescence	3
or EDS 402	Methods of Teaching English: Adolescence	
or EDS 403	Methods of Teaching Mathematics: Adolescence	
or EDS 405	Methods of Teaching Science: Adolescence	

SPE 640	Learning and Behavioral Disabilities (LBD); Etiology and Research Based Interventions	3
SPE 652	Functional Curriculum for Students with Severe Disabilities and ASD	3
SPE 650	Intellectual Disabilities and Autism Spectrum Disorders: Etiology & Educational Needs	3
SPE 649	Transition Issues for Adolescents with Disabilities	3
SPE 580	Classroom Management	3
SPE 615	Research Methods	3
SPE 631	Reading and Writing Process for Students with Learning and Behavioral Disorders	3
SPE 644	Collaborative Practices on a Transdisciplinary Team	3
EDU 556	Assessment for Diverse Learners	3
SPE 698	Seminar in Teaching and Assessment	3
SPE 693	Student Teaching	9
EDU 595	Child Abuse Workshop	0
EDU 596	Prevention of School Violence Workshop	0
EDU 597	Dignity for All Students Workshop	0
Total Credits		57

Roadmap

Recommended Semester Schedule for Major Course Requirements for a Dual Degree of BA in Physics and MS SWD Adolescence Generalist

Freshman	
Fall	**Spring**
MAT 111	MAT 112
PHY 104	PHY 104
PHY 223 & 223L	PHY 224 & 224L
CSC 111 & 111L	EDS 101
Sophomore	
Fall	**Spring**
MAT 211	MAT 222
PHY 104	PHY 104
PHY 225 & 225L	PHY 226 & 226L
CHM 111 & 111L	Science Electvie[1]
EDU 250	SPE 341
Junior	
Fall	**Spring**
PHY 104	PHY 104
PHY 350	PHY 351 (if did not take PHY 350)
PHY elective[2]	PHY elective[2]
EDS 223	EDS 360
Senior	
Fall	**Spring**
PHY 104	PHY 104
PHY elective[2]	PHY 445
SPE 580	PHY 498
SPE 631	PHY elective[2]
SPE 640	EDS 405
	1 Graduate Education Course
Fifth Year	
Fall	**Spring** **Summer**
EDU 556	SPE 595 SPE 644
SPE 650	EDU 596 SPE 649
SPE 652	EDU 597 EDU 556
SPE 698	EDU 615
	Student Teaching

1 Science Elective to be chosen from BIO 111, CHM 112, CSC 112, MAT 219 or MAT 351. The science elective may be taken in a subsequent semester if it requires a prerequisite. In this case, take a course in the Core Curriculum in the spring semester of the freshman year.

2 Choice of upper division courses: PHY 330, PHY 331, PHY 332, PHY 335, PHY 443, PHY 446, and PHY 447

Learning Goals & Objectives

Student Learning Goal 1

Physics majors will know how to learn physics.

Students will:

- **Objective A:** Critically assess written expositions of physics, contrasting those ideas which are fundamental from those which are consequential;
- **Objective B:** Identify the circumstances under which a principle applies.

Student Learning Goal 2

Physics majors are critical thinkers that can produce analytical solutions to physical problems.

Students will:

- **Objective A:** Identify a problem and generate equivalent statements of a problem;
- **Objective B:** Delineate the principles of physics and analytical techniques used to obtain a solution to a problem;
- **Objective C:** Apply the principles and techniques of physics to obtain a solution to a problem.

Student Learning Goal 3

Physics majors possess the technical skills needed to function effectively in a physics laboratory.

Students will:

- **Objective A:** Collect a broad range of data with an ability to adapt to new experimental methods, apparatus and tools;
- **Objective B:** Apply fundamental statistical methods to analyze data;
- **Objective C:** Display data with clarity.

Student Learning Goal 4

Physics majors communicate ideas in physics with precision and clarity.

Students will:

- **Objective A:** Produce precise and clear expository written material about physics;
- **Objective B:** Produce well-organized and clear oral presentations of physics material.

Pre-Engineering Programs

Director: Michael Wood (wood5@canisius.edu), PhD

Introduction

The 2+2 Pre-Engineering program covers the first two years of a four-year engineering major and is staffed by faculty from the Physics Department. After two years at Canisius students transfer to an Engineering School of their choice to complete the engineering degree. The 2+2 program covers the science, mathematics and computer programming that form the basis of study for the first two years of most engineering school curricula. The 3+2 dual degree program allows students to complete a physics major from Canisius, providing an extensive grounding in both science and engineering that can open the doors to advanced engineering and technology studies in a wide range of fields. The 2+2 program is perhaps better suited to students closely focused on a specific engineering field or career path. The 3+2 program is particularly suited to students who are strongly interested in demanding scientific or industrial research and development careers, particularly in an interdisciplinary area. The dual degree program includes an articulation agreement for students interested in pursuing Mechanical Engineering at the Pennsylvania State University at Erie, The Behrend College. Many students also pursue their engineering degree at University at Buffalo (UB), and Canisius maintains close contact with UB. For a more detailed description of the program and faculty, visit the Physics website (https://www.canisius.edu/academics/programs/physics/).

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Students interested in advanced scientific or engineering study may be best served the by dual degree Engineering and Physics program, while students clearly focused on a specific engineering discipline are encouraged to pursue the 2+2 program. It is possible to switch between the two programs easily in the first year of study. Some students choose to remain at Canisius after completing the program to pursue other majors such as physics, mathematics, chemistry or computer science, and the transfer into these other majors is simple and straightforward.

Qualifications

Transfer and completion of the engineering degree at the second institution requires an admissions process at the second institution and satisfaction of the degree requirements, including core and/ or general education requirements, of that institution. Entering students should be prepared to take Calculus 1 (MAT 111) their first semester.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Careful consultation with an advisor is particularly important due to the tremendous number of pre-requisites in most engineering courses and the varied requirements of different engineering majors.

Free Electives

Students should consult with an advisor in Physics or Engineering to discuss their elective course choices to ensure timely completion of both degrees. Careful advising is a must in this program. Linear Algebra (MAT 219), Organic Chemistry (CHM 227- CHM 228) or additional computer science courses (CSC 111, CSC 112, CSC 213) may be valuable electives.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

- 2+2 Program (p. 219)
  Note: Students in this program (The Pre-Engineering 2+2 program) do not complete a degree at Canisius, but transfer to an engineering institution. Instead of completing the Core Curriculum at Canisius, students complete the general studies requirements at the engineering institution.
- 3+2 Program (p. 220)
  Students in the 3+2 dual degree program complete the general education requirements as part of their overall Canisius education. These requirements can be found in the Core Curriculum (p. 30) or All-College Honors Curriculum (p. 45) sections of the catalog.

EGR 111 Introduction to Engineering Design **3 Credits**
This first course is an introduction to the field of engineering. Students are introduced to engineering analysis and design through projects in robotics. The students will gain an overview of the various engineering fields and will be instructed in professional ethics and etiquette.
Offered: fall.

EGR 207 Engineering Statics **3 Credits**
Students study forces and torques on rigid bodies, couples, moments, centroids and moments of inertia. They consider equilibrium conditions, friction, free body diagrams, applications to beams, trusses, frames, and other structures.
Prerequisite: PHY 223 & MAT 112.
Offered: fall.

EGR 208 Engineering Dynamics **3 Credits**
Students learn about the kinematics of particles and rigid objects. Topics include D'Alembert's Principle, moving reference frames, work-energy methods, impulse, and momentum vibration with applications to engineering problems.
Prerequisite: EGR 207.
Offered: spring.

EGR 211 Engineering Thermodynamics **3 Credits**
Students learn the fundamental concepts and laws of thermodynamics, equilibrium with applications to physical and chemical systems.
Prerequisite: PHY 223.
Offered: fall.

EGR 214 Strength of Materials **3 Credits**
Students investigate the behavior of materials under mechanical loading. The topics include stress and strain relationships, shear, bending moments, torsion, deflection, beams, columns, energy methods, and failure criteria.
Prerequisite: EGR 207.
Offered: spring.

2+2 Program

Introduction

Students complete the first two years of an engineering program in Canisius' Liberal Arts environment, taking advantage of small class sizes and individual attention before transferring to a larger institution to complete their studies. Coursework at Canisius is just as rigorous and demanding as at Engineering institutions, so students typically report little difficulty adapting to the transfer. Early consultation with an advisor is required to map out a curriculum, as the choice of desired engineering major will alter the course schedule somewhat. Mathematical preparation is key to timely completion of this program, again requiring close attention to course scheduling. Outside the classroom, our students work with modern fabrication techniques with our 3-D printer and Computer Numerical Control router. The students can build standard parts or prototype new pieces.

Dual Majors

Dual majors in the Engineering 2+2 program would be subject to the regulations of the engineering institution.

Curriculum

Major Courses

This varies depending on the engineering major chosen, but typically includes:

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 222	Differential Equations	3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
or PHY 225	General Physics for Physical Science Majors III	
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
PHY 104	Seminar for Physics and Pre-engineering Majors	0
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory	4
or CHM 112	General Chemistry II	
PHY 226 & 226L	Basic Electronics and Basic Electronics Laboratory	4
EGR 111	Introduction to Engineering Design	3
EGR 207	Engineering Statics	3
EGR 208	Engineering Dynamics	3
EGR 214	Strength of Materials	3
EGR 211	Engineering Thermodynamics	3
Total Credits		58

Additional Course Recommendations

Linear Algebra (MAT 219), additional computer science (CSC 111) and/or Organic Chemistry (CHM 227, CHM 228), depending on choice of engineering major.

Roadmap

Recommended Schedule: 2+2 program

Freshman

Fall	Spring
EGR 111	MAT 112
MAT 111	PHY 104
PHY 104	PHY 224 & 224L
PHY 223 & 223L	CSC 111 & 111L
CHM 111 & 111L	

Sophomore

Fall	Spring
MAT 211	MAT 222
PHY 104	PHY 104
PHY 225 & 225L	PHY 226 & 226L
EGR 207	EGR 208
EGR 211	EGR 214

Junior

Fall	Spring
Completed at an Engineering Institution	Completed at an Engineering Institution

Senior

Fall	Spring
Completed at an Engineering Institution	Completed at an Engineering Institution

Additional Course Considerations

Additional courses in some engineering majors may require cross-registration at University at Buffalo (UB).

3+2 Program

Introduction

The dual degree 3+2 program is a dual degree program, with a BS in Physics from Canisius and a BS in Engineering from an Engineering school. The student will complete all of the requirements for the BS degree in Physics, which includes the foundation, fields, attributes, and capstone courses in the college's core curriculum. While at the college, the student can use modern physics equipment like a high-resolution spectroscopy equipment, lasers, high vacuum apparatus, a multi-channel nuclear spectrometer, various radiation detectors, and an X-ray spectrometer. The student is also encouraged to perform research with a professor or with an internship with a local company or manufacturer. It is in the student's best interest to gain as much professional experience as possible.

Dual Majors

The dual degree 3+2 program is a dual degree program, with a BS in Physics from Canisius and a BS in Engineering from an Engineering school. An additional major at Canisius in this program would prove difficult to complete, due to the already demanding nature of this program; however, students are urged to discuss this with an academic advisor.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
PHY 104	Seminar for Physics and Pre-engineering Majors	0
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory	4
PHY 226 & 226L	Basic Electronics and Basic Electronics Laboratory	4
PHY 330	Electrodynamics I	3
PHY 331	Electrodynamics II	3
PHY 332	Statistical and Thermal Physics	3
PHY 335	Mathematical Analysis for Physicists	4
PHY 350 & PHY 351	Modern Physics Laboratory and Advanced Laboratory	2
PHY 443	Classical Mechanics	3
PHY 445	Special Topics in Physics	1
PHY 446	Quantum Mechanics I	4
PHY 447	Quantum Mechanics II	3
PHY 498	Senior Project	1-3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
MAT 111 & MAT 112	Calculus I and Calculus II	8
MAT 211	Calculus III	4
MAT 222	Differential Equations	3
Science Elective (choose one of the following):		3-4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	
CSC 112 & 112L	Data Structures and Data Structures Laboratory	
MAT 219	Linear Algebra	
MAT 351	Probability & Statistics I	
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	
Total Credits		69-72

Also, Depending on Engineering Major

Code	Title	Credits
EGR 111	Introduction to Engineering Design	3
EGR 207	Engineering Statics	3
EGR 208	Engineering Dynamics	3
EGR 211	Engineering Thermodynamics	3
EGR 214	Strength of Materials	3

In some cases, cross registration for additional courses at University at Buffalo may be advisable.

Additional Course Considerations

Junior/Senior level courses are offered on a rotating two year basis. Students will take either the course listed Junior or Senior year, depending on availability. Students will complete the missing requirements in the Physics Major while at the partnering Engineering school. Prior to completion of the third year at Canisius, students will meet with their advisor to plan out the courses to be completed in the Physics major. Course

selection may vary somewhat depending on engineering major and partner institution.

Linear Algebra (MAT 219) is advisable, and required by some engineering programs.

Roadmap

Recommended Schedule: 3+2 Program

Freshman

Fall	Spring
EGR 111	MAT 112
MAT 111	PHY 104
PHY 104	PHY 224 & 224L
PHY 223 & 223L	Science Elective[1]
CSC 111 & 111L	

Sophomore

Fall	Spring
MAT 211	MAT 222
PHY 104	PHY 104
PHY 225 & 225L	PHY 226 & 226L
EGR 207	EGR 208
CHM 111 & 111L	

Junior

Fall	Spring
PHY 104	PHY 104
EGR 211	EGR 214
Fall Physics courses in Physics Curriculum	Spring Physics courses in Physics Curriculum

1 Science Elective to be chosen from BIO 111, CHM 112, CSC 112, MAT 219 or MAT 351. The science elective may be taken in a subsequent semester if it requires a prerequisite. In this case, take a course in the Core Curriculum in the spring semester of the freshman year.

Political Science (BA)

Chair: John D. Occhipinti, PhD

This major provides students with a comprehensive understanding of Political Science, including American Government, International Relations, Comparative Politics, and Political Philosophy. Political Science supplies students with an ideal academic background for careers in public administration, politics, the law, national security, business, education or academia. The Political Science major also gives students a strong foundation for teaching social studies and can be combined with a major in secondary education. In addition, the Political Science major provides a good basis for graduate study in public policy, international relations, business administration and journalism. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Political Science website (https://www.canisius.edu/academics/programs/political-science/).

Students are encouraged to participate in the following experiences that are available through the Political Science Department:

- Mentoring for careers, graduate programs and law school;
- Visits to Congress and the Supreme Court;
- Travel to Europe for EuroSim: international student simulation of the European Union;
- Internships in Buffalo, Albany and Washington, D.C.;
- Experiential learning: simulations of the European Union (PSC 355) and Political Campaigns (PSC 236);
- Opportunities for students to present their research papers at conferences;
- Several student clubs connected with American politics, world politics and the law;
- Membership in Pi Sigma Alpha, the National Political Science Honor Society;
- Departmental Honors Program;
- Funding for travel and internships from the Fitzpatrick Institute.

Each year, the department honors its best graduating seniors with two awards:

- The Pi Sigma Alpha Award is given to the student who best exemplifies academic excellence and the pursuit of knowledge in Political Science.
- The Woodrow Wilson Award is awarded to the Political Science major who combines academic excellence with a demonstrated commitment to public service.

Qualifications

To complete the Political Science major, student must earn a minimum grade of C in each of the following courses: PSC 103, PSC 104, PSC 111, PSC 140, PSC 150 and HSV 303. Students must also pass PSC 401. In addition, students must maintain a 2.0 overall average to graduate with a degree in Political Science.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Résumé Building

The Political Science Department assists students in finding internships that allow them to gain valuable professional experience and contacts. Positions are available in Washington and Albany, as well as in Western New York with political campaigns, local government, the U.S. House of Representatives and Senate, and the New York State Assembly and Senate.

The major's required senior capstone course, PSC 401, focuses on professional development and career paths related to the major and is offered with cooperation of career planning experts in the Griff Center.

The college's many study abroad programs offer exciting opportunities to examine politics in other countries or pursue internships, such as with a Member of Parliament in the British House of Commons. Students may also take a limited number of their major electives while studying abroad.

Students may also participate in EuroSim, an international intercollegiate simulation of the European Union, attended by American and European delegations. In even-numbered years students engage in subsidized travel to Europe related to the simulation, and in odd-numbered years the event is held in the United States.

Opportunity for independent study under the guidance of a faculty member is available for juniors and seniors who wish to explore topics that go beyond the department's normal course offerings.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Most of the best majors in Political Science decide to build their resumes and enhance their post-graduate opportunities by earning dual or triple degrees with other programs. The most popular combinations are with Criminal Justice, European Studies, International Relations and Urban Studies. Other common dual degrees combine Political Science with Communication Studies, Economics, English, History, Modern Language and Sociology.

Political Science and Law

The Political Science major is the most common academic major for prospective law students. The college offers a recommended curriculum for pre-law studies, which can be easily combined with the Political Science major. The Political Science Department is the home for the college's Raichle Pre-Law Center, which offers students mentoring, scholarship and internships. For further information, students should consult with the chair of the Political Science Department and the director of Pre-Law Center.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

For Political Science majors considering a career in business and/or a master of business administration (MBA) degree, preparation can be obtained by pursuing a minor in Business Management (18 credits). Many Political Science students will also benefit by taking macroeconomics and microeconomics (ECO 101 and ECO 102) as free electives.

Department Honors Program

The Political Science Honors Program provides an opportunity for outstanding students in the major to go beyond the usual course offerings. Majors who take part in the program will engage in original research under the close supervision of a faculty member. The research project provides the opportunity for students to do independent study on a topic of their own choosing. Participants in the All-College Honors Program may use their senior thesis to fulfill this requirement, provided that this project is prepared under the direction of a member of the Political Science Department.

Taking part in the Honors program can also make students more competitive after graduation, whether for further schooling or employment. For example, students applying for graduate school or law school in their senior year can refer to the research paper in their application. At the same time, participation on the Departmental Honors Program will enable students' faculty advisors to write more detailed and enthusiastic letters of recommendation for these applications.

Requirements

- Students may apply in the spring of their junior year or in their senior year
- Grade point average overall (to apply for the program and upon graduation): 3.30
- Grade point average for major courses (to apply for the program and upon graduation): 3.50
- Honors Research: a lengthy paper involving original research in the field of Political Science under the direction of a member of the Political Science Department

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Required Courses		
PSC 103	The American Constitution	3
PSC 104	American Political Process	3
PSC 111	Western Political Tradition	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
PSC 401	Political Science Capstone (see course listings for details)	1
HSV 303	Research Methods in the Social Sciences	3

5 Political Science electives (at least 2 of these must be at the 300- or 400-level)	15
Total Credits	34

Major Electives (five courses)

Students must complete five Political Science electives, at least two of which must be at the 300/400 level. The following qualify as major electives: any PSC course, CRJ 227, CRJ 228, ECO 401, ECO 411, HIS 280, HIS 345, HIS 347, HIS 394, HON 231, HON 238. With prior approval, up to two major electives (below the 300 level) may be taken in approved study abroad programs. With prior approval, PSC 499 and All-College Honors thesis directed by faculty members in the Political Science Department may be counted as major electives. Student are encouraged to pursue internships and earn credit for these via PSC 498, but these are pass-fail credits and may not be counted as major electives.

Additional Course Considerations

Aside from the provisions noted above for courses taken abroad, all required and elective courses in the major and minors must be taken at Canisius College. In general, PSC 103, PSC 104, PSC 140, and PSC 150 may be taken in any sequence. It is strongly recommended that these four courses, along with PSC 111 and HSV 303, be completed before the beginning of the junior year.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
PSC 103	PSC 104
PSC 150	PSC 140
Sophomore	
Fall	**Spring**
PSC 111	HSV 303
PSC Major Elective	PSC Major Elective (300/400 level)
Junior	
Fall	**Spring**
PSC Major Elective (300/400 level)	PSC Major Elective
Senior	
Fall	**Spring**
PSC 401	PSC Major Elective

Learning Goals & Objectives

Student Learning Goal 1

All successful Political Science majors will develop knowledge of the fields of Political Science and will be able to use and apply that knowledge.

Students will:

- **Objective A:** Demonstrate competency with the conceptual frameworks of Political Science generally;
- **Objective B:** Demonstrate competency with conceptual frameworks of American Politics and Government;
- **Objective C:** Demonstrate competency with conceptual frameworks of Comparative Politics and Government;
- **Objective D:** Demonstrate competency with conceptual frameworks of International Relations;
- **Objective E:** Demonstrate competency with conceptual frameworks of Political Philosophy;
- **Objective F:** Demonstrate competency with issues regarding social science hypothesis-testing;
- **Objective G:** Sustain an argument using the vocabulary and ideas of public and world affairs.

Student Learning Goal 2

All successful Political Science majors will be able to think critically, conduct research and communicate effectively.

Students will:

- **Objective A:** Demonstrate the ability to think critically;
- **Objective B:** Demonstrate the ability to conduct research;
- **Objective C:** Demonstrate competency with issues comprising information literacy;
- **Objective D:** Demonstrate the ability to communicate effectively in writing;
- **Objective E:** Demonstrate the ability to communicate effectively orally.

Student Learning Goal 3

All successful Political Science majors will be able to articulate issues associated with leadership in public affairs as well as articulate issues associated with ethics in public affairs.

Students will:

- **Objective A:** Demonstrate an understanding of leadership qualities;
- **Objective B:** Assess the ethical issues associated with decisions in public affairs.

Minors

- Political Science Minor (p. 225)
- Law and Public Policy Minor (p. 225)

Courses

PSC 103 The American Constitution **3 Credits**
Provides a thorough grounding in the U.S. Constitution, which is America's founding document, and serves as the basis for its governmental system.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.

PSC 104 American Political Process **3 Credits**
An introduction to American politics including political socialization, public opinion and ideologies, political participation in electoral systems and mass movements, political parties and interest groups.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.

PSC 111 Western Political Tradition **3 Credits**
Development of Western political tradition from Machiavelli to present, emphasizing development of liberal, conservative and socialist traditions.
Fulfills College Core: Field 4 (History), Justice
Offered: fall & spring.

PSC 140 International Relations **3 Credits**
Introduces basic concepts and paradigms of world politics. International security, political economy, and globalization. Power politics, international organizations, transnational politics, and human rights.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: fall & spring.

PSC 150 Comparative Government and Politics **3 Credits**
Comparative analysis of foreign countries. Governments, ideologies, parties, elections, political culture, civil society and democracy in industrialized and developing countries.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: every fall.

PSC 215 National Issues and Public Policy **3 Credits**
Selected policy issues and their relationship to the political process including health care, homeland security, welfare and housing.
Offered: fall of-even numbered years.

PSC 224 Congress and the Legislative Process **3 Credits**
Survey of Congressional procedures and practices. Emphasis on recent changes within Congress, and the position of Congress in the U.S. political and governmental system.
Fulfills College Core: Field 5 (Social Sciences), Oral Communication
Offered: fall of even-numbered years.

PSC 225 U.S. Presidency **3 Credits**
Survey of the U.S. executive branch of government, including President, Vice President, White House staff, Executive office and the bureaucracy.
Offered: fall of odd-numbered years.

PSC 233 Interest Groups and Public Opinion in America **3 Credits**
Development of the notions of opinion and interest, their transmission and their influence on decision-making.
Offered: spring of even-numbered years.

PSC 236 Political Campaigning **3 Credits**
Campaigning resources, techniques, strategies and goals. Practical and theoretical treatment. Field research.
Offered: spring of odd-numbered years.

PSC 237 State and Local Politics **3 Credits**
The institutions and policies of state and local governments, with focus on New York State. State and local elections, gubernatorial politics, state legislatures, community politics.
Offered: fall of odd-numbered years.

PSC 241 Human Rights and Globalization **3 Credits**
History and evolution of international human rights laws. Explores human rights violations, challenges for enforcing human rights and prosecuting abuses. Analysis of human rights conditions in different world regions.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: every fall.

PSC 242 International Organizations **3 Credits**
International and transnational. Intergovernmental and non- governmental. Regional and global. Content areas: political, economic and humanitarian.
Fulfills College Core: Advanced Writing-Intensive, Field 5 (Social Sciences), Global Awareness
Offered: fall of odd-numbered years.

PSC 245 American Foreign Policy **3 Credits**
US foreign relations in political perspective, including diplomatic history since 1945, as well as government structure, decision-making processes, and controversial foreign policy issues.
Offered: every fall.

PSC 250 Politics in Latin America **3 Credits**
History of Latin America. Introduces the region's political, economic, and social characteristics. In-depth analysis of issues and countries in the region.
Fulfills College Core: Field 5 (Social Sciences)
Offered: every spring.

PSC 270 Information Literacy in the 21st Century: Facing Borders **3 Credits**
Introduces students to the concept of information literacy, “a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (ALA, 1989). Over the course of the semester students will learn to apply these abilities to conduct research effectively and efficiently.
Fulfills College Core: Global Awareness
Offered: Fall.

PSC 320 American Constitutional Law I **3 Credits**
Development of constitutional law in the U.S. from the founding to present. Use of case-study method with focus on judicial review, the separation of powers and federalism. The growth of executive authority and the emergence of the administrative state.
Fulfills College Core: Justice
Offered: every fall.

PSC 321 American Constitutional Law II **3 Credits**
The historical origin and development of the Bill of Rights.Close examination of Supreme Court decisions interpreting and expanding rights. Freedom of speech and religion, due process and equal protection. Current controversies over the right to privacy, affirmative action and gender equality.
Fulfills College Core: Justice
Offered: spring of even-numbered years.

PSC 334 Public Administration **3 Credits**
The Federal Bureaucracy: its relationship to the executive and the public. Elements and issues of public-sector management.
Prerequisite: PSC 103 or PSC 104 or permission of instructor.
Offered: every spring.

PSC 335 Political Parties **3 Credits**
Development and present conditions of political parties. What they do and why they do it. Parties' past and present roles, as well as their future prospects.
Offered: fall of odd-numbered years.

PSC 336 Urban Government and Politics **3 Credits**
Structure, function, operation and politics of local government. Machine and reform models, power and participation. Significant policy issues to be addressed include schools, finances, land use, planning and crime.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall of even-numbered years.

PSC 345 Transnational Crime After 9/11 **3 Credits**
Cross-border organized crime and responses, especially in North America and Europe. Emphasis on drug trafficking, terrorism and irregular immigration. Crime-fighting, counter-terrorism, border management and international police cooperation. Guest speakers and video.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: spring of even-numbered years.

PSC 355 European Union **3 Credits**
History of European integration. Structure, process and politics of EU policies. Optional co-curricular international, intercollegiate simulation of the EU and travel (EuroSim).
Fulfills College Core: Field 5 (Social Sciences), Global Awareness, Oral Communication
Offered: spring of odd-numbered years.

PSC 360 Political Economy of the Developing World **3 Credits**
Reviews the main theories on development. Explores the relationship between international and domestic factor in fostering development.
Fulfills College Core: Field 5 (Social Sciences)
Offered: every spring.

PSC 370 Domestic Conflicts & Peace **3 Credits**
Examines the factors that account for domestic conflicts. Explores the different mechanisms for their resolution and the challenges faced by post-conflict societies.
Fulfills College Core: Advanced Writing-Intensive, Field 5 (Social Sciences)
Offered: fall of even numbered years.

PSC 401 Political Science Capstone **1 Credit**
Focuses on professional development and career planning related to the major, including law, government, politics, lobbying, security, international affairs, teaching, and business. Classroom sessions and online assignments to prepare students for post-graduate success. Offered with cooperation of career planning experts in the GriffCenter.
Offered: every fall.

PSC 420 The Constitution, The War on Terror and Civil Liberties **3 Credits**
Civil liberties issues in the war on terrorism. Treatment and rights of detainees, enhanced interrogation, ethnic and racial profiling, use of the war power including drone strikes, data collection, Foreign Intelligence Surveillance Act; U.S. citizens as enemy combatants. Military detention and trial of terrorist suspects.
Offered: spring of odd-numbered years.

PSC 442 Seminar in International Relations **3 Credits**
Theoretically informed perspectives on global affairs explored through selected topics and issues unified by a central theme, such as leaders and leadership in international politics.
Prerequisite: senior International Relations major, or permission of instructor. **Restriction:** must be an International Relations major or obtain permission of instructor.
Fulfills College Core: Core Capstone
Offered: every spring.

PSC 452 Politics of Identity in Europe **3 Credits**
Nationalism, separatism and European identities. Immigrant communities and responses by Europe's governments and political parties. Islam in Europe and challenges for identity and security. Lessons for U.S. public policy.
Restriction: seniors only.
Fulfills College Core: Core Capstone
Offered: occasionally, currently scheduled for fall 2018.

PSC 498 Internship **1-12 Credits**
A variety of opportunities are available locally, as well as in Washington, DC and Albany. Internships arranged by faculty members in government, law offices and non-profit organizations. Prior to seeking approval, a student must work with a faculty member to develop a syllabus of learning goals, written outputs and deadlines. Pass-Fail. Does not apply as a major elective.
Prerequisite: permission of chair of the political science department & associate dean.
Offered: fall & spring.

PSC 499 Independent Study **1-3 Credits**
Research and/or directed reading under direction of faculty members associated with the Political Science department. Prior to seeking approval, a student must work with a faculty member and his/her on-site supervisor to develop a syllabus of learning goals, written outputs and deadlines. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: fall & spring.

Law and Public Policy Minor

The Law and Public Policy minor focuses on the relationship between the legal system and public policy and is open to students in any major. It requires 8 courses (24 credits).

Code	Title	Credits
ECO 101	Principles of Macroeconomics	3
ECO 311	Metropolitan Economic Development and GIS [1]	3
PSC 103	The American Constitution	3
PSC 215	National Issues and Public Policy	3
PSC 245	American Foreign Policy	3
PSC 320	American Constitutional Law I	3
PSC 321	American Constitutional Law II	3
or PSC 420	The Constitution, The War on Terror and Civil Liberties	
PSC 345	Transnational Crime After 9/11	3
Total Credits		24

[1] Students may substitute ECO 330 or ECO 411 for ECO 311. Other substitutions may be made at the discretion of the Department Chair and need to be approved in advance.

Political Science Minor

The Political Science minor, for non-majors only, provides an introduction to an overview of the discipline.

Code	Title	Credits
PSC 103	The American Constitution	3
PSC 104	American Political Process	3
PSC 111	Western Political Tradition	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
Public Policy - Select one of the following:		3
PSC 215	National Issues and Public Policy	
PSC 237	State and Local Politics	
PSC 245	American Foreign Policy	
PSC 334	Public Administration	
PSC 345	Transnational Crime After 9/11	
PSC 360	Political Economy of the Developing World	
American Political Institutions and Behavior - Select one of the following:		3
PSC 224	Congress and the Legislative Process	
PSC 225	U.S. Presidency	
PSC 335	Political Parties	
Total Credits		21

Psychology (BA or BS)

Chair: Charles Goodsell, PhD (goodselc@canisius.edu)

Introduction

The Department of Psychological Sciences at Canisius College offers two separate degrees; a Bachelor of Arts (BA) in Psychology and a Bachelor of Science (BS) in Psychology. While there are some similarities between these degrees, the differences between the two degrees are primarily related to what you want to do with the degree and the coursework aligned within each program.

The most noteworthy **difference between** the two degrees is the level of science/research courses that must be completed. In addition to the acquisition of discipline-specific knowledge obtained through the 10 courses aligned within the BA program, there are three additional statistical/research based courses that must be completed for the B.S. degree. In the Bachelor of Science degree program, student majors will be given the opportunity to complete scientifically rigorous coursework and to be immersed in research based experiential activities. Courses aligned with the degree are specifically designed to increase student knowledge and understanding of advanced statistical methods, and to help students develop the mastery of a skillset useful in attaining postgraduate and/or career objectives that utilize these methods of scientific inquiry.

The Department of Psychology maintains two useful websites; a Departmental website (https://www.canisius.edu/academics/programs/psychology/) that provides a description of the program, faculty, facilities, academic and co-curricular opportunities, and the Psycholopedia (http://psycholopedia.net/) that includes information on upcoming courses and events, psychology relevant student organizations, and a guide for students interested in applying to graduate school.

Qualifications

Students must maintain a 2.0 GPA in the major and a 2.0 overall average to graduate with a degree in Psychology.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

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BA Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Required Courses		
PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 202	Research Methods in Psychology	3
Area 1: Neuroscience & Cognition		
Select one of the following:		3
PSY 324	Cognitive Psychology	
PSY 326	Psychology of Memory	
PSY 391	Biopsychology of Stress	
PSY 397	Neurobiology of Mental Disorders	
PSY 398	Neurobiology of Childhood Mental Disorders	
PSY 410	Fundamentals of Human Neuropsychology	
PSY 431	Sensation and Perception	
Area II: Developmental & Psychosocial		
Select one of the following:		3
PSY 203	Lifespan Developmental Psychology	
PSY 302	Personality Psychology	
PSY 303	Abnormal Psychology	
PSY 318	Social Psychology	
PSY 323	Motivation and Emotion	
PSY 384	Child & Adolescent Psychopathology	
Area III: Outcomes & Applications		
Select one of the following:		3
PSY 229	Industrial/Organizational Psychology	
PSY 329	Leadership and Motivation	
PSY 334	Child, Family and Community Psychology	
PSY 373	Behavior Modification	
PSY 395	Assessment in the Behavioral Sciences	
PSY 452	Techniques of Counseling	
PSY 453	Theories of Counseling	

Psychology Electives: Any three psychology courses listed in the catalog or substitutions approved by the department chairperson	9
Total Credits	30

Note: All students must complete a "Senior Assessment Exam" during the second semester of their senior year to complete the degree requirements

BS Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Required Courses		
PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 202	Research Methods in Psychology [1]	3
PSY 401	Advanced Statistics Seminar [2]	3
PSY 402	Applying Research Methods in Psychology [3]	3
Application of Psychology		
Choose one of the following		3
PSY 495	Guided Research in Psychology [4]	
PSY 498	Psychology Practicum	
PSY 497	Advanced Experimental Psychology [5]	
Area 1: Neuroscience & Cognition		
Select one of the following:		3
PSY 324	Cognitive Psychology	
PSY 326	Psychology of Memory	
PSY 391	Biopsychology of Stress	
PSY 397	Neurobiology of Mental Disorders	
PSY 398	Neurobiology of Childhood Mental Disorders [6]	
PSY 410	Fundamentals of Human Neuropsychology [7]	
PSY 431	Sensation and Perception	
Area II: Developmental & Psychosocial		
Select one of the following:		3
PSY 203	Lifespan Developmental Psychology	
PSY 302	Personality Psychology	
PSY 303	Abnormal Psychology	
PSY 318	Social Psychology	
PSY 323	Motivation and Emotion	
PSY 384	Child & Adolescent Psychopathology	
Area III: Outcomes & Applications		
Select one of the following:		3
PSY 229	Industrial/Organizational Psychology	
PSY 329	Leadership and Motivation	
PSY 334	Child, Family and Community Psychology	
PSY 373	Behavior Modification	
PSY 395	Assessment in the Behavioral Sciences	
PSY 452	Techniques of Counseling	
PSY 453	Theories of Counseling	
Psychology Electives		
Students may take any three psychology courses listed in the catalog. Substitutions of other courses may be possible but require approval by the department chairperson		9
Total Credits		39

Note: All students must complete a "Senior Assessment Exam" during the second semester of their senior year to complete the degree requirements

1 Please note that PSY 201 is a prerequisite course for PSY 202

2 Please note that PSY 401 requires a minimum grade of B- in PSY 201

3 Please note that PSY 202 is a prerequisite course for PSY 402

4 Please note that junior or senior status, permission of the instructor and completion of PSY 101, PSY 102, PSY 201 and PSY 202 are prerequisites for PSY 495

5 Please note that junior or senior status, permission of the instructor, and completion of PSY 101, PSY 102, PSY 201, PSY 202 and PSY 401 are prerequisites for PSY 497

6 Please note that PSY 398 requires a minimum grade of C in PSY 397 or BIO 114 or permission of the instructor

7 Please note that a PSY 410 requires a minimum grade of C in PSY 101 or PSY 102, BIO 111 or BIO 114 or BIO 345 or permission from the instructor

Roadmap

Recommended Semester Schedule for Major Course

Freshman	
Fall	**Spring**
PSY 101	PSY 102
Sophomore	
Fall	**Spring**
PSY 201	PSY 202
Psychology Area Course (I, II or III)	Psychology Area Course (I, II or III)
Junior	
Fall	**Spring**
Psychology Area Course (I, II or III)	Psychology elective
PSY 401 (BS students only)	PSY 402 (BS students only)
Senior	
Fall	**Spring**
Psychology elective	Psychology elective
Psychology Practical Experience (BS students only)[1]	

[1] This requirement may be completed with 3 or more credits of PSY 495, PSY 497, or PSY 498.

Learning Goals & Objectives

Student Learning Goal 1

Students will demonstrate knowledge in selected discipline-specific content areas of psychology.

Students will:

- **Objective A**: demonstrate knowledge in learning theory, cognition, and memory;
- **Objective B**: demonstrate knowledge of sensation and perception, and physiological psychology;.
- **Objective C:** demonstrate knowledge in the areas of clinical and abnormal psychology as well as personality theory;
  Objective D: demonstrate knowledge of social and developmental psychology

· Student Learning Goal 2

Students will demonstrate abilities related to scientific inquiry in psychology.

Students will:

- **Objective A**: demonstrate knowledge of basic research methods;
- **Objective B:** use basic statistics to test hypotheses and correctly interpret the results of their analyses;
- **Objective C**: think critically about psychological phenomena and research;
- **Objective D**: demonstrate the communication skills, information literacy, and technology literacy necessary for conducting and interpreting scientific psychological research.

Student Learning Goal 3

Students will demonstrate knowledge of psychological ethics and social responsibility.

Students will:

- **Objective A**: demonstrate knowledge of the APA code of Ethics in the treatment of human and nonhuman research participants;
- **Objective B**: demonstrate knowledge of ethical guidelines within the context of academic and professional psychology.

Minors

The Psychology Department offers several psychology minors:

Child, Family and Community Studies (p. 245)

Clinical/Counseling Psychology Minor: Child/Adolescent Populations (p. 231)

Clinical/Counseling Psychology Minor: Adult Populations (p. 231)

Forensic Psychology Minor (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/forensic-psychology-minor/)

General Psychology Minor for Non-Majors (http://catalog.canisius.edu/undergraduate/college-arts-sciences/psychology/psychology-minor/)

Industrial/Organizational Psychology Minor (p. 232)

Neuropsychology Minor (p. 233)

Psychology Minor (p. 232)

School Psychology (p. 233)

Sports Psychology (p. 233)

Courses

PSY 101 Introduction to Psychology I **3 Credits**
The study of behavior from a psychological perspective. Topics include methods of psychological inquiry, motivation and emotion, thinking and language, learning, memory and physiological basis of behavior. Students taking PSY 101 are expected to be available for participation in research studies or equivalent activity.
Offered: every fall.

PSY 102 Introduction to Psychology II **3 Credits**
The study of behavior from a psychological perspective. Topics include methods of psychological inquiry, human development, social behavior, psychological testing, personality, psychopathology and psychotherapy. May be taken before PSY 101. Students taking PSY 102 are expected to be available for participation in research studies or equivalent activity.
Fulfills College Core: Field 5 (Social Sciences)
Offered: every spring.

PSY 201 Basic Statistics for Behavioral Sciences **3 Credits**
Descriptive statistics, probability, sampling distributions, hypothesis testing and inferential statistics. SPSS for Windows.
Offered: fall & spring.

PSY 202 Research Methods in Psychology **3 Credits**
Philosophical measurement and statistical concepts of common methods of experimental and non-experimental research. Design and execution of project required.
Prerequisite: PSY 201 or equivalent.
Offered: fall & spring.

PSY 203 Lifespan Developmental Psychology **3 Credits**
This course is designed to give an introductory overview of lifespan developmental psychology. We begin with neonatal development and end with aging and death. At each period in the lifespan we discuss physical, cognitive, emotional, and social development. By the end of the course, you will be able to identify how human psychological development progresses across the lifespan, explain fundamental historical theories of human development, and describe important scientific research in the field. We also discuss the impact discrimination, economic disadvantage, and other social justice issues can have on development.
Offered: every fall & spring.

PSY 229 Industrial/Organizational Psychology **3 Credits**
Selection, evaluation and training of personnel, facilitation of group dynamics on the job, leadership, worker motivation and effects of workplace environment on performance and morale. Emphasis on student career development.
Offered: occasionally.

PSY 230 Psychology of Religion and Spirituality **3 Credits**
Psychology of Religion and Spirituality covers the measurement, biological processes, triggers, development, and behavioral correlates of religion and spirituality broadly defined.
Prerequisite: Minimum grade of C- in RST 101.
Offered: occasionally.

PSY 235 Health Psychology **3 Credits**
Psychology of health-related behaviors, including coping with stress and ill health, physician-patient relationships, compliance with medication and psychological influences on specific disorders. Students conduct personal stress assessments and design interventions.
Offered: occasionally.

PSY 302 Personality Psychology **3 Credits**
Covers modern theories on what personality is, different ways of approaching and assessing personality, how personality develops across the lifespan, causes of individual differences in personality, and the many important things personality influences such as physical and psychological health.
Offered: once a year.

PSY 303 Abnormal Psychology **3 Credits**
Overview of the clinical symptoms associated with adult psychiatric disorders identified in the Diagnostic and Statistical Manual, 5th Edition (DSM-V). Factors associated with the development of the various types of psychopathology are examined and empirically validated treatments for these conditions are reviewed. The impact of mental illness on those afflicted, their family members and society is examined.
Offered: every fall & spring.

PSY 307 Adolescent Psychology **3 Credits**
Physiological, psychological and emotional factors in achieving maturity. Focuses on time frame from pre-puberty to emerging adulthood. Extension of theoretical orientation to adolescent problems. Emphasis on real world problems and solutions.
Offered: occasionally.

PSY 310 Applied Behavioral Analysis **3 Credits**
This course focuses on the principles of applied behavior analysis and their application in classroom and home environments. Students receive in-depth instruction in functional behavioral assessments as well as the application of ABA principles to intervention, skill acquisition, and data management.
Offered: once a year.

PSY 312 Autism Spectrum Disorders and Developmental Disabilities **3 Credits**
This course provides an in-depth review of the characteristics and features of autism spectrum disorders (ASD) and their impact on the adaptive, social, emotional, and behavioral functioning of individuals with ASD. Additionally this course will cover treatments and interventions for individuals with ASD. Attention will be given to etiology, myths, assessment, research-based interventions, program models, and legal issues.
Offered: once a year.

PSY 318 Social Psychology **3 Credits**
This course will examine scientific research on how individuals' thoughts and emotions influence social behavior. Topics will include persuasion, stereotyping and prejudice, social identity, aggression, and relationships.
Offered: once a year.

PSY 320 Cultural Psychology **3 Credits**
Humans learn from our cultures in all aspects of our lives. Choosing a mate, political attitudes, prejudices, and even basic perceptions all depend on cultural learning. In all our actions we rely on ideas, values, strategies, feelings, and goals that have been shaped by our cultures. We cover both the psychological universals and the variations across cultures.
Fulfills College Core: Core Capstone
Offered: fall & spring.

PSY 323 Motivation and Emotion **3 Credits**
Covers behavioral, cognitive and physiological theories of motivation and emotion with special focus on humanistic motivational theories. Through course activities and assignments, students will apply the theories learned in class to their own behaviors, examine the nature and progress made on their personal goals during the semester and understand the dynamic interplay between goal- directed behavior and emotion.
Offered: spring.

PSY 324 Cognitive Psychology **3 Credits**
The psychological processes that enable us to acquire, store, retrieve and use knowledge. Topics include perception, attention, memory, language, thinking, and decision making. Applications in education, psychopathology.
Offered: once a year.

PSY 326 Psychology of Memory **3 Credits**
Examines the findings from laboratory research to gain a better understanding of the structure and organization of memory. Topics include working memory, encoding and retrieval processes, implicit memory and multiple memory systems, reconstructive processes in memory, eyewitness memory, developmental changes in memory, neuropsychological correlates of memory and memory disorders, source memory, memory improvement, and the repressed/recovered memory controversy.
Offered: occasionally.

PSY 329 Leadership and Motivation **3 Credits**
Determinants of leadership effectiveness, factors influencing effectiveness in maintaining leadership position, influencing followers and accomplishing group objectives. Emphasis on communication competencies, group interaction, experiential learning.
Prerequisite: PSY 101 or PSY 102, & junior or senior standing.
Offered: spring.

PSY 334 Child, Family and Community Psychology **3 Credits**
Focuses on the prevention of mental, emotional and behavioral disorders through the study of family and community influences on the developing child. Risk and preventive factors are examined and interventions at the family and community level are explored. Introduces students to the field of community psychology and offers meaningful ways for students to apply concepts. Also counts for CRJ credit.
Offered: every fall.

PSY 335 Psychopathology in Media **3 Credits**
An examination of the manner by which psychopathology is presented in various forms of media (e.g., movies, TV, internet). The validity of the information presented is comparatively analyzed against empirically generated diagnostic criteria, and the resulting impact of misinformation and inaccurate portrayals on societal knowledge/views of individuals with mental illness is discussed.
Offered: occasionally.

PSY 340 Stereotyping and Prejudice **3 Credits**
This course will examine stereotyping, prejudice, and discrimination from a social psychological perspective. This will include a focus on both individual differences and situational influences on stereotyping and prejudice, as well as a consideration of the cognitive and emotional factors that can promote or inhibit these processes.
Offered: Occasionally.

PSY 360 Psychology and Law **3 Credits**
Examines issues of considerable importance to the criminal justice system using empirical techniques from psychology. Topics include the conviction of the innocent, lie detection, the death penalty, the insanity defense, civil commitment, eyewitness memory, false and repressed memories, children in the courtroom, jury decision-making, and expert testimony.
Offered: spring of even-numbered years.

PSY 365 Psychology of Aging **3 Credits**
This course examines the developmental changes experienced during late life. We begin by examining the demography and science of aging. We then turn to the normative physical, cognitive, and psychosocial changes that come with aging. We also consider variability in normative age related changes. We examine the fine threshold between function and disability as well as important issues in late life such as long-term care and death & dying. Throughout the semester we engage with these topics with a variety of hands-on learning and lecture experiences to augment our excellent text. In particular, we address the unique challenges of aging for marginalized groups in a series of immersive projects.
Fulfills College Core: Core Capstone
Offered: occasionally.

PSY 370 School Psychology **3 Credits**
This course is an introduction to the field of school psychology including historical foundations, current issues, principles of assessment and service delivery models. This course focuses heavily on applying current research and evidence-based practice for children with behavioral, emotional, developmental and learning problems in schools. Issues involving schools as systems, cultural diversity, human exceptionality, professional standards, legal/ethical considerations, and the interrelationship between general and special education are emphasized.
Prerequisite: PSY 203.
Offered: every fall.

PSY 373 Behavior Modification **3 Credits**
A study of the principles of conditioning and learning as applied to practical approaches of behavior management and change. Students will learn how to conduct a functional analysis of problematic behavior and how to apply evidence based behavior-change techniques. Self-regulation and cognitive-behavioral techniques will also be discussed.
Offered: every fall.

PSY 380 Science and Pseudoscience in Psychology: Thinking Critically **3 Credits**
This course will provide students with the skills needed to scientifically evaluate fringe-science, paranormal, and otherwise unorthodox claims about human behavior that regularly appear in popular culture and in the popular media. A major focus of the course will be on biases and heuristics in cognition that are typically adaptive but that also lead to predictable errors in reasoning.
Fulfills College Core: Field 5 (Social Sciences)
Offered: Every spring.

PSY 384 Child & Adolescent Psychopathology **3 Credits**
This course will introduce students to the signs and symptoms of various psychiatric disorders of childhood and adolescence (e.g., conduct disorder, ADHD). Factors correlated with the development of these disorders are reviewed and empirically validated treatments for these conditions are discussed.
Prerequisite: A grade of C- or higher in PSY 101 and PSY 102.
Offered: every fall.

PSY 391 Biopsychology of Stress **3 Credits**
This course is designed to give students an understanding of the anatomical, physiological and psychological components and effects of short-term and long-term stress. Material includes effects of stress on cardiovascular, digestive, reproductive, endocrine, and immune systems as well as factors that modulate the stress response.
Offered: once a year.

PSY 392 Prosocial Behavior **3 Credits**
This course will examine the scientific evidence for what motivates people to behave in ways that benefit others. Topics include altruism, psychopathy, preferences for fairness, and the neuroscientific underpinnings of morality.
Fulfills College Core: Justice
Offered: Fall

PSY 395 Assessment in the Behavioral Sciences **3 Credits**
Addresses fundamentals of classic test theory, scaling, reliability, and validity and provides an overview of measures of intelligence, achievement, and personality for clinical, educational, and research use.
Prerequisite: PSY 201.
Offered: fall & spring.

PSY 396 Behavior Intervention/Spec Pop **3 Credits**
This RBT course has been designed for individuals that meet the eligibility requirements of the Behavior Analyst Certification Board (e.g., the person must possess a high school degree). This course is a hybrid course designed to teach you the basic principles, procedures and the underlying philosophy of ABA delivered in class and online. This training program is based on the Registered Behavior Technician Task List and is designed to meet the 40-hour training requirement for the RBT credential. The program is offered independent of the BACB.
Offered: occasionally.

PSY 397 Neurobiology of Mental Disorders **3 Credits**
Examines the role of the putative biological underpinnings of the symptoms, etiology and treatment of various mental disorders. Includes introduction to neuroanatomy, neurophsyiology, and neurotransitter systems.
Prerequisite: PSY 101 or PSY 102, or permission of instructor.
Offered: every fall.

PSY 398 Neurobiology of Childhood Mental Disorders **3 Credits**
This course is a sequel to Neurobiology of Mental Disorders and focuses on the neurobiological underpinnings of several developmental and other mental disorders affecting children today. There is extensive discussion of the role of a variety of prenatal and postnatal stressors in the development of mental disorders.
Prerequisite: Minimum grade of C in PSY 397 or BIO 114 or BIO 345 or Permission of Instructor.
Offered: every spring.

PSY 401 Advanced Statistics Seminar **3 Credits**
Topics include bivariate and multiple regression, least-squares estimation, model-building techniques, assumptions and diagnostics, mediation and moderation, the logistic model and exploratory factor analytic techniques. SPSS will be used throughout. Students will conduct a final research project through secondary analysis of a large national data set.
Prerequisite: Minimum grade of B- in PSY 201.
Offered: every fall.

PSY 402 Applying Research Methods in Psychology **3 Credits**
This course is designed to provide students with hands-on practice with experimental research methods in psychology. Students will learn how to plan, conduct, and analyze their own experimental research, and develop the knowledge and skills to apply and critique the scientific method across a variety of settings.
Prerequisite: PSY 202.
Offered: spring.

PSY 410 Fundamentals of Human Neuropsychology **3 Credits**
An advanced course that provides students with a perspective on the neural mechanisms underlying behavior. Material covered in the course will include (but not be limited to) structure and function of the brain from the cellular to the structural levels, brain imaging techniques, and brain development, plasticity and neurological disorders.
Prerequisite: Minimum grade of C in PSY 101 or 102 or BIO 111 or BIO 114 or BIO 345 or Permission of Instructor.
Offered: spring.

PSY 431 Sensation and Perception **3 Credits**
This course is an introduction to sensory systems and perceptual processes. Course focuses on each of the major sensory systems, beginning with the anatomy and physiology of the sense organ, and builds up to how we represent that information in the mind.
Prerequisite: Minimum grade of C in PSY 101 or PSY 102.
Offered: occasionally.

PSY 452 Techniques of Counseling **3 Credits**
Examines the therapeutic relationship and traditional counseling and psychotherapy skills. Provides the opportunity to practice counseling strategies in an encouraging and supportive environment. Assists in the development of effective communication skills applicable in professional, general human services, and nonprofessional helper roles. Assessment and treatment strategies, used to address the most common disorders encountered in counseling, are studied.
Offered: every fall.

PSY 453 Theories of Counseling **3 Credits**
Explores classic and contemporary theories of counseling. Cultural competency and empirical research are examined. Counseling approaches for specific diagnoses are discussed. Relates theories to students' personal experiences and observations of others. Assists students with exploring their personal views regarding therapeutic change.
Offered: spring.

PSY 495 Guided Research in Psychology **1-6 Credits**
Opportunity for students interested in designing and conducting empirical research to collaborate with faculty in research activities leading to undergraduate or professional conference presentations and possible publication.
Prerequisite: PSY 101, PSY 102, PSY 201, PSY 202, junior or senior status, & permission of instructor.
Offered: fall, spring, & summer.

PSY 497 Advanced Experimental Psychology **3 Credits**
Intended for advanced students with the interest, prerequisites and commitment to experimental research. Involves students in hands-on data collection and statistical analysis.
Prerequisite: PSY 101, PSY 102, PSY 201, PSY 202, PSY 401, junior or senior status, & permission of instructor.
Offered: fall.

PSY 498 Psychology Practicum **6 Credits**
Internships are available in clinical counseling psychology, forensic psychology, industrial/organizational psychology, school psychology, and sports psychology. Joint supervision by staff members and agency personnel. Registration requirements vary; six credit maximum. Please click on this link to find out how to register for a practicum http://canisiuspsychology.net/psychwiki/ PracticumRequirements.
Prerequisite: permission of chair or supervising faculty member.
Offered: every fall, spring, & summer.

PSY 499 Independent Study **3 Credits**
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: fall, spring, & summer.

Clinical/Counseling Psychology Minor (Adult Populations)

The Clinical/Counseling Minor (Adult Populations) is appropriate for individuals planning careers in Psychology (Clinical/Counseling), Social Work, Mental Health Counseling, or any other field tied to the provision of mental health services. A minor in clinical/counseling psychology is useful for individuals interested in providing therapeutic services to a variety of client populations. Whereas some opportunities directly related to psychology do exist for bachelor's degree holders (e.g., assistants in rehabilitation centers, or in other jobs involving data collection and analysis), attaining an advanced degree in the field (e.g., Master or Doctorate) leads to a broader array of potential career opportunities. Individuals interested in advanced degrees in psychology have the opportunity to learn psychotherapeutic approaches (e.g., psychodynamic, interpersonal, cognitive-behavioral, eclectic) to treat a variety of adjustment and mental health problems with various populations (e.g., individual, family, marital, group).

Curriculum

Code	Title	Credits
PSY 303	Abnormal Psychology	3
PSY 452	Techniques of Counseling	3
or PSY 453	Theories of Counseling	
Choose four of the following classes		12
PSY 302	Personality Psychology	
PSY 323	Motivation and Emotion	
PSY 324	Cognitive Psychology	
PSY 391	Biopsychology of Stress	
PSY 395	Assessment in the Behavioral Sciences [1]	
PSY 397	Neurobiology of Mental Disorders [2]	
PSY 410	Fundamentals of Human Neuropsychology [3]	
PSY 498	Psychology Practicum (must take 498C - clinical counseling psychology)	
Total Credits		18

1 Please note that PSY 201 is a prerequisite for PSY 395

2 Please note that PSY 101 and PSY 102 or permission by instructor are prerequisites for PSY 397

3 Please note that PSY 410 requires a minimum grade of C in PSY 101 or PSY 102 or BIO 111 or BIO 114 or BIO 345 or permission of instructor

Clinical/Counseling Psychology Minor (Child/Adolescent Populations)

The Clinical/Counseling Minor in Child/Adolescent Populations is appropriate for individuals planning careers in Psychology (Clinical/

Counseling), Social Work, Mental Health Counseling, or any other field tied to the provision of mental health services. A minor in clinical/counseling psychology is useful for individuals interested in providing therapeutic services to a variety of client populations. Whereas some opportunities directly related to psychology do exist for bachelor's degree holders (e.g., assistants in rehabilitation centers, or in other jobs involving data collection and analysis), attaining an advanced degree in the field (e.g., Master or Doctorate) leads to a broader array of potential career opportunities. Individuals interested in advanced degrees in psychology have the opportunity to learn psychotherapeutic approaches (e.g., psychodynamic, interpersonal, cognitive-behavioral, eclectic) to treat a variety of adjustment and mental health problems with various populations.

Curriculum

Code	Title	Credits
PSY 373	Behavior Modification	3
PSY 384	Child & Adolescent Psychopathology	3
PSY 203	Lifespan Developmental Psychology	3
Choose three of the following:		9
COM 304	Family Communication	
PSY 310	Applied Behavioral Analysis	
PSY 312	Autism Spectrum Disorders and Developmental Disabilities [1]	
PSY 334	Child, Family and Community Psychology	
PSY 370	School Psychology [2]	
PSY 396	Behavior Intervention/Spec Pop	
PSY 398	Neurobiology of Childhood Mental Disorders [3]	
PSY 498	Psychology Practicum (must take 498C - clinical counseling psychology practicum)	
PSY 452	Techniques of Counseling	
or PSY 453	Theories of Counseling	
Total Credits		18

1 Please note that PSY 312 requires a minimum grade of C in PSY 101 or PSY 102 and in both PSY 201 and PSY 202

2 Please note that PSY 203 is a prerequisite course for PSY 370

3 Please note that PSY 398 requires a minimum grade of C in PSY 397 or BIO 114 or permission of instructor

Forensic Psychology Minor

The forensic minor is for students who have interest in clinical, applied, and/or research within the area of psychology and law. It is an interdisciplinary field encompassing mental health (psychology, psychiatry, social work), law, and public policy. Forensic psychology offers a wide variety of career opportunities.

Curriculum

Code	Title	Credits
Required Courses		
CRJ 227	Criminal Justice I	3
CRJ 228	Criminal Justice II	3
CRJ 330	Current Issues in Forensic Psychology	3
PSY 360	Psychology and Law	3
PSY 303	Abnormal Psychology	3
Choose one of the following psychology electives:		3
PSY 373	Behavior Modification	
PSY 395	Assessment in the Behavioral Sciences	
PSY 452	Techniques of Counseling	
PSY 453	Theories of Counseling	
PSY 498	Psychology Practicum (must take 498F - Forensic Psychology Practicum)	
Choose one of the following criminal justice electives:		3
CRJ 250	Criminal Law and Procedure	
CRJ 300	Special Topics in Criminal Justice (must be approved by minor director)	
CRJ 337	Violence and the Family	
CRJ 344	Violent Crime in American	
CRJ 351	Police and the Community	
CRJ 354	Juvenile Delinquency	
CRJ 356	Treatment of Offenders	
CRJ 357	Alternatives to Incarceration	
CRJ 382	Criminal Justice Ethics	
Total Credits		21

General Psychology Minor

The general Psychology Minor is for non-Psychology Majors only. Elective courses for this minor must be approved by the student's Psychology Department advisor.

Code	Title	Credits
PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
4 Psychology (PSY) electives approved by Psychology advisor		12
Total Credits		18

Industrial-Organizational Psychology Minor

This interdisciplinary collaboration between the Departments of Psychology and Management/Marketing is for students who expect to work in any kind of organization, a human services agency, a law firm, a hospital, etc. The application of psychology in a business environment is most directly apparent in the field of human resources, but the subject matter relates to all work environments. Courses in the minor cover how employees are selected and placed, the training of employees, performance evaluation, interpersonal interaction and employee relation, motivation and job satisfaction, etc. Students with the minor are well prepared to succeed in any kind of organizational environment.

The Industrial/Organizational Minor consists of seven courses, described under Curriculum. Additional optional courses that students may find useful include PSY 373, PSY 452, ECO 101,ECO 102, ACC 201, ACC 202, COM 319, MKT 201, MKT 320, MKT 331, MGT 367, ENT 401.

Curriculum

Code	Title	Credits
Required Courses		
PSY 229	Industrial/Organizational Psychology	3
PSY 318	Social Psychology	3
PSY 329	Leadership and Motivation	3

PSY 395	Assessment in the Behavioral Sciences	3
MGT 360	Organizational Behavior	3
MGT 364	Human Resources Management	3
MGT 460	Ethical Power and Influence for Leaders	3
or ENT 411	Entrepreneurial Leadership	
Total Credits		21

Note: Students may not take PSY 229 and MGT 360 in the same semester.

Neuropsychology Minor

The Neuropsychology minor is designed to attract students who are interested in pursuing careers in the fields of clinical and cognitive neuropsychology as well as to enhance understanding of brain/behavior relationships for those aspiring to other health-related professions.

Although this minor is available to any student, prerequisites may make it difficult for some students to complete all of the requirements.

Curriculum

In addition to the four foundation courses (PSY 101, PSY 102, PSY 201, PSY 202) and fulfillment of the Core Area requirement, students will be expected to complete the following courses:

Code	Title	Credits
BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
PSY 410	Fundamentals of Human Neuropsychology	3
Four courses from the following including one from list A and one from list B		12
Group A		
PSY 391	Biopsychology of Stress	
PSY 397	Neurobiology of Mental Disorders	
PSY 398	Neurobiology of Childhood Mental Disorders	
Group B		
PSY 324	Cognitive Psychology	
PSY 326	Psychology of Memory	
PSY 431	Sensation and Perception	
Total Credits		19

School Psychology Minor

Open to Psychology majors or non-majors with appropriate background coursework. This minor focuses on psychology's role in the field of education and provides a foundation for those interested in a career as a School Psychologist. The required practicum experience must take place in a school or mental health service setting. This minor is of particular value to students interested in education, testing or working with children.

Curriculum

Code	Title	Credits
Required Courses		
PSY 370	School Psychology [1]	3
PSY 373	Behavior Modification	3
PSY 395	Assessment in the Behavioral Sciences [2]	3
PSY 498	Psychology Practicum (must register for 498D, the practicum in school psychology) [3]	6
Select two elective courses from the following		6
PSY 310	Applied Behavioral Analysis	
PSY 312	Autism Spectrum Disorders and Developmental Disabilities	
PSY 334	Child, Family and Community Psychology	
Total Credits		21

1 Please note that PSY 203 is a prerequisite course for PSY 370

2 Please note that PSY 201 is a prerequisite course for PSY 395

3 Please note that enrollment in PSY 498 requires permission from the minor supervisor and must involve direct service in a school or mental health service setting that focuses on children.

Sports Psychology Minor

The sports psychology minor provides students interested in psychology and physical education with an interdisciplinary approach to the study of sport, physical activity, health psychology, exercise psychology or coaching. The minor ideally prepares the student for careers in coaching or sport psychology. Students may seek advisement from the Psychology Department or the Department of Kinesiology.

Curriculum

Code	Title	Credits
Required Courses		
PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
PSY 329	Leadership and Motivation [1]	3
PSY 373	Behavior Modification	3
PSY 391	Biopsychology of Stress	3
HED 361	Psychology of Sport and Mental Health	3
PED 380	Concepts of Teaching Sport Skills	3
Total Credits		21

1 Please note that PSY 101 or PSY 102 and junior or senior standing are prerequisites for PSY 329

Religious Studies (BA)

Chair: Rebecca Krawiec, PhD

Introduction

Religion plays an important role in human life and history. A strong liberal education requires introduction to the intellectual analysis of this important dimension of human existence. A major in religious studies and theology provides a broad intellectual context for those who wish to study religion in greater depth. The major program offers study and appreciation of Roman Catholicism, other sects of Christianity including Eastern Orthodoxy, Jewish religious thought, the Islamic tradition, and surveys of other religions. This approach involves the comparative study of religions and a positive approach to diversity of religious understandings. The department provides the opportunity for a critical appraisal of religious faith through the study of primary source materials and the use of interdisciplinary methodologies, such as anthropology, theology, and history. The department also expresses the religious dimension of the college's founding in the Jesuit and Catholic tradition. Its orientation is to serve the community that shares the

values of that tradition. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Religious Studies and Theology website (https://www.canisius.edu/academics/programs/religious-studies-and-theology/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Religious Studies and Theology.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Religious Studies and Theology majors have often majored in Classics, Communications, Education, History, Philosophy, or Psychology.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

(10 Courses)

Code	Title	Credits
Required Courses		
RST 200	Introduction to the Hebrew Bible	3
RST 201	Introduction to the New Testament	3
Choose one of the following RST courses in a non-Christian contemporary religion:		3
RST 220	Introduction to Eastern Religions	
RST 221	Native American Religions	
RST 224	Islam: Tradition and Revival	
RST 240	Development of Jewish Religious Thought and Practice	
RST 400	Religious Studies and Theology Seminar	3
RST 489	Projects for Majors	3
Electives		
Select 5 RST electives at the 200-level or higher		15
Total Credits		30

We invite you to meet with the chair or relevant professor to choose electives for the major that align with your interests.

Additional Course Considerations

The Department has no required foreign language course(s) for its majors, but it strongly encourages all majors, if they are considering seminary or graduate study in theology or religion, to take a foreign language that is especially relevant to a student's interest in the discipline, such as Biblical Hebrew, Greek, Latin, or a modern foreign language. Greek and Latin are offered through the Classics Department and modern foreign languages through the Department of Modern Languages. Literatures and Cultures. Biblical Hebrew is offered on demand when there is sufficient student interest through the Religious Studies and Theology Department

The Department also offers courses for credit through the Institute for the Global Study of Religion. (https://www.canisius.edu/academics/office-academic-affairs/academic-institutes-and-centers/institute-global-study-religion/) These are immersion experiences, often abroad, and are offered on a rotating basis. Please contact Dr. Timothy Wadkins (wadkins@canisius.edu) for further information.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
RST 101	RST 200
Sophomore	
Fall	**Spring**
RST 201	RST Course in a non-Christian contemporary religion
RST Elective	
Junior	
Fall	**Spring**
RST 400	RST Elective
RST Elective	RST Elective
Senior	
Fall	**Spring**
RST 489	RST Elective

Learning Goals & Objectives

Student Learning Goal 1

Religious Studies and Theology majors will know the scriptures which form the foundation of Judaism and Christianity, as well as the basic insights of at least one other world religion.

Students will:

- **Objective A**: Students will demonstrate understanding of the scriptural traditions of the Hebrew Bible;
- **Objective B**: Students will demonstrate understanding of the scriptural traditions of the New Testament;
- **Objective C**: Students will demonstrate understanding of the religious teachings of a religion other than Christianity.

Student Learning Goal 2

Religious Studies and Theology majors will be critical thinkers about religion.

Students will:

- **Objective A**: Describe the context of a particular religious or theological question and develop a thesis in response to the question;
- **Objective B**: Analyze alternative viewpoints of the issues raised by the question and construct a logical defense of the argument;
- **Objective C**: Draw warranted conclusions from the evidence gathered.

Student Learning Goal 3

Religious Studies and Theology majors will do scholarly research and writing in Religious Studies or Theology.

Students will:

- **Objective A**: Use a major theory or a theoretically-based method from the academic study of religion as part of an analysis of a religious or theological question;
- **Objective B**: Demonstrate understanding of intellectual property and present evidence in a fair and ethical manner;
- **Objective C**: Cite sources in an appropriate documentation style.

Minors

The Religious Studies and Theology Department offers a minor for non-majors in Religious Studies and Theology. The department is also the administrative center for an Interdisciplinary Minor in Catholic Studies that is open to students in any major.

- Religious Studies and Theology Minor (p. 238)
- Interdisciplinary Minor in Catholic Studies (p. 237)

Courses

RST 101 Introduction to Religious Studies and Theology **3 Credits**
An academic introduction to the nature and role of religion in human life and society, including the Jesuit and Catholic traditions as well as other world religions.
Offered: fall & spring.

RST 200 Introduction to the Hebrew Bible **3 Credits**
Introduction to the literature of the Hebrew Bible within its ancient Near Eastern setting. Particular attention paid to historical, literary, cultural, and theological questions.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness
Offered: occasionally.

RST 201 Introduction to the New Testament **3 Credits**
Introduction to the literature of the New Testament, the socio-historical context that produced it, and its use as a historical source for the study of the early Christian movement.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 219 History of Eastern Orthodox Christianity **3 Credits**
Historical study of Eastern Christian Churches.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness
Offered: occasionally.

RST 220 Introduction to Eastern Religions **3 Credits**
This survey course will introduce students to the range and complexity of some of the religious traditions associated with South, Southeast and East Asia. Students will encounter a wide variety of primary and secondary sources describing these religious traditions and experiences, including sacred texts, mythology, medieval devotional poetry, and more.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness
Offered: occasionally.

RST 221 Native American Religions **3 Credits**
The nature of indigenous religions in Native American societies and the effect of cultural change through contact with other cultures.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 224 Islam: Tradition and Revival **3 Credits**
In this course, after an introduction to the foundations of Islam, we will investigate this diversity through the study of Islamic scriptures, Muslim cultures, social institutions, religious practices, and Muslim and Western writings about them in order to better understand Islam and Muslims in the U.S. and throughout the world. Also accepted for Anthropology major and minor credit.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness
Offered: occasionally.

RST 229 Religious Perspectives on Animals **3 Credits**
This course will focus on the historical and cultural relationship between the world's religions and the animal realm.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 230 Catholic Belief Today **3 Credits**
Based on the Creed, this course examines the fundamental articles of faith. They include faith itself, the Bible, church tradition; the one God as Trinity, revealed in Jesus, and present through the Holy Spirit; the church as a structured and prayerful community, with seven sacraments.
Prerequisite: RST 101.
Fulfills College Core: Advanced Writing-Intensive, Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 231 Introduction to Catholic Studies **3 Credits**
Major movements and personalities in Catholic theology, history, culture, and spirituality. How the Catholic church came to be what it is today. The Catholic world-view and its relation to modern society.
Prerequisite: RST 101.
Fulfills College Core: Advanced Writing-Intensive, Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 234 Christians (En) Countering Injustice **3 Credits**
An examination of Christian concepts of justice and a consideration of how to build or restore justice when injustices occur. Service learning required.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Justice
Offered: occasionally.

RST 237 Images of Jesus in Film and Art **3 Credits**
Development of artistic representations of Jesus and other Biblical persons along with Christian concepts and themes. Selection of European and American films as well as pertinent art from Western Christianity.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 240 Development of Jewish Religious Thought and Practice **3 Credits**
Jewish religious thought and practice from biblical times to the present, including modern trends in Judaism.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 304 Women, Gender, and Religion: Judaism, Christianity, Islam **3 Credits**
This course examines the role of sacred texts and their interpretation in defining both women's roles and their status as "women," particularly in terms of their bodies, in three related religious traditions: Judaism, Christianity, and Islam. Emphasis will be placed on contemporary women's re-interpretation and formation of positive female expressions of religious identity over and against patriarchal traditions and practices.
Prerequisite: RST 101.
Fulfills College Core: Diversity, Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 312 Race, Ethnicity, and the New Testament **3 Credits**
This course will examine parts of the New Testament that engage issues of race and ethnicity, both to understand their ancient roots and their role in American history of slavery and civil rights. Attention will also be paid to the construction of anti-Semiticism in Christianity from these passages.
Prerequisite: RST 101.
Fulfills College Core: Diversity, Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 314 New Testament in Literature and Art **3 Credits**
New Testament themes and personalities analyzed from a scriptural perspective and compared with expressions in the arts. Relationship of religion and art, scriptural roots of Christian art.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 324 Biblical Archaeology **3 Credits**
An investigation of cultures and artifacts related to the texts of the Bible. We will discuss archaeological procedures and principles and examine how archaeological evidence from the Ancient Near East helps us understand the Bible and in some cases how it supports or challenges the biblical narratives.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 325 Early Christianity **3 Credits**
Historical study of the development of Christianity from its first century roots to its rise as the dominant religion of the Roman Empire.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 327 Modern Global Christianity **3 Credits**
Historical study of the life, thought, and worship of Christians, both Protestant and Catholic, from the Reformation to the present.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 340 Moral Issues Today **3 Credits**
Inquiry into Catholic theological moral theories and exploration of several moral problems.
Prerequisite: RST 101.
Fulfills College Core: Ethics, Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 341 Catholic Social Ethics: Theological Perspectives **3 Credits**
Study of the principles of Catholic Social Teachings articulated in papal and episcopal documents with contemporary applications.
Prerequisite: RST 101.
Fulfills College Core: Advanced Writing-Intensive, Field 1 (Religious Studies and Theology), Justice
Offered: occasionally.

RST 345 Bio-Moral Problems **3 Credits**
Inquiry into Catholic theological moral theories and application of theories to problems raised by bioethics and by health care.
Prerequisite: RST 101.
Fulfills College Core: Ethics, Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 347 Ecotheology **3 Credits**
Critical investigation of Christian theologies' messages about and methods of engaging environments.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Oral Communication
Offered: occasionally.

RST 355 The Problem of Suffering **3 Credits**
Suffering confronts each individual in illness, broken relationships, failures, drug abuse and death. The course addresses how God is active even in suffering.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.

RST 360 Magic, Science and Religion **3 Credits**
This course will introduce students to some of the diverse ways that cultures of the world create meaning from the chaos of the apprehended world, as well as some of the approaches that scholars of religion utilize to understand those processes. We will focus not only on 'exotic' societies and peoples, but also explore the meanings of magic, science and religion in more familiar contemporary North America.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness
Offered: occasionally.

RST 390 Christian Marriage **3 Credits**
Concentrated investigation of Christian and Catholic marriage. Examination of the history, ideas, ideals, and practices about marriage. Relevant questions from perspectives of justice, ethics, diversity, and global awareness.
Fulfills College Core: Core Capstone

RST 391 Religious Diversity in Buffalo **3 Credits**
Exploration of religious diversity in Buffalo, the United States, and the world. May include visits to congregations to observe worship and interviews to learn about religious beliefs, practices, and experiences of interactions with other religious communities.
Fulfills College Core: Core Capstone
Offered: occasionally.

RST 392 Liberation Theologies **3 Credits**
Study of the origins and development of Liberation Theology in Latin America and the ways in which it evolved among other racial, ethnic, and gender groups in the United States and elsewhere. Special attention to issues of ethics and social justice.
Fulfills College Core: Core Capstone
Offered: occasionally.

RST 400 Religious Studies and Theology Seminar **3 Credits**
A seminar for RST majors and minors. This class is an advanced level seminar that will focus on some of the most influential theoretical and methodological approaches in the field.
Prerequisite: RST 101. **Restriction:** must be a religious studies and theology major or minor or obtain permission of the instructor.
Offered: occasionally.

RST 489 Projects for Majors **3 Credits**
Concentrated investigation of a topic of particular interest to the student, under supervision of faculty advisor.
Prerequisite: RST 101 & departmental approval. **Restriction:** must be a religious studies and theology major or minor or obtain permission of the instructor.
Offered: fall & spring.

RST 496 Internship **3 Credits**
Combination of teaching or religious work with special readings and theological reflection, under the guidance of department faculty. Internships require an application and approval by the associate dean.
Prerequisite: RST 101 & permission of both the department chair & associate dean. **Restriction:** must be a religious studies and theology major or minor or obtain permission of the instructor.
Offered: fall & spring.

RST 499 Independent Study **1-3 Credits**
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Interdisciplinary Minor in Catholic Studies

Director: Stephen Chanderbhan, PhD (chanders@canisius.edu)

The Catholic Studies minor (https://www.canisius.edu/academics/programs/catholic-studies/) at Canisius College examines the doctrinal, historical, legal, spiritual and cultural traditions of Catholicism.

In addition, it includes "dialogue" with people of other faiths and the examination of intellectual disciplines that have been influenced by Catholicism, such as art, history, law, literature, politics, philosophy and the sciences. As a result, this program requires study in several departments of the college and highlights the Catholic tradition upon which the college was founded.

Any person who wishes to know more about the Catholic heritage, to further one's personal development, or to pursue a principle-based career in public service, medicine, journalism or law would find this minor relevant. Those pursuing church-related careers or academic objectives would also want to complete this program. Future seminarians, lay ministers, and teachers interested in the Catholic educational system, those preparing for graduate work in theology or religious studies and anyone planning to pursue an administrative, marketing, accounting, or IT career in a Catholic organization such as a social work agency or health care system would benefit from this program. The program director will help the student choose appropriate courses or appoint an advisor to do so.

Each student who completes this minor will:

1. Be knowledgeable about some facet of Catholic doctrine or piety and the relevance of a concept that originates from the Catholic philosophical or social traditions;
2. Be able to think critically about the Catholic contribution in one area of history or culture;
3. Become an effective scholarly researcher and writer about Catholicism and its intellectual heritage.

All courses in the Catholic Studies minor except CTH 400 are offered in traditional academic departments and usually meet the criteria established by these departments for field studies or major credit. Most courses in the minor are also part of the college's core curricula and therefore can also be taken as a way to fulfill core requirements.

In addition, language and reading courses in Latin and Greek are strongly recommended.

Please contact Dr. Steve Chanderbhan (chanders@canisius.edu) (716-888-2223) in the Department of Philosophy for a more detailed description of the program, including course descriptions, possible course substitutions, and ways students have benefitted from this minor in recent years.

Curriculum of the Catholic Studies Minor

Code	Title	Credits
RST 231	Introduction to Catholic Studies	3
CTH 400	Research in Catholic Studies	3
Select one course in each of the following areas (but no more than two courses from any one department in these areas):		12
Catholic Theology and Life		
Catholic Culture: Literature, Art, Music & Science		
Catholic History & Politics		
Catholic Philosophy & Social Thought		
Total Credits		18

Courses that Fulfill Catholic Theology and Life

Code	Title	Credits
HON 359	Spiritual Autobiography	3
RST 230	Catholic Belief Today	3
RST 353	Seven Signs of Love	3
RST 390	Christian Marriage	3

Courses that Fulfill Catholic Culture: Literature, Art, Music and Science

Code	Title	Credits
ENG 233	The Quest in Medieval Literature	3
FAH 213	Greek and Roman Art	3
FAH 224	Medieval Art	3
FAH 245	Renaissance Art	3
FAH 248	Baroque Art	3
FAM 216	Medieval and Renaissance Music	3
HON 242	Cultural Constructions of Jesus	3
RST 237	Images of Jesus in Film and Art	3
RST 314	New Testament in Literature and Art	3
RST 343	Franciscan Reply to Science	3

Courses that Fulfill Catholic History and Politics

Code	Title	Credits
CLS 104	Roman History	3
CLS 308	Pagans and Christians	3
HIS 106	The Medieval World	3
HIS 131	Latin American History to 1830	3
HIS 226	History of Ireland	3
HIS 306	American Religious Experience	3
HIS 316	The Reformation	3
HON 246	American Religions	3
HON 316	Famous Jesuits	3
HON 356	Pope Francis: 21st-Century Thinker	3
RST 235	Religion and Politics	3
RST 325	Early Christianity	3
RST 327	Modern Global Christianity	3

Courses that Fulfill Catholic Philosophy & Social Thought

Code	Title	Credits
HON 360	Topics in Modern Christianity	3
PHI 267	Faith, Reason, and Justice Catholic Social Thought	3
PHI 302	Medieval Philosophy	3
RST 340	Moral Issues Today	3
RST 341	Catholic Social Ethics: Theological Perspectives	3
RST 342	Theological Ethics and Environmental Justice	3
RST 345	Bio-Moral Problems	3
RST 392	Liberation Theologies	3
RST 393	Catholic Concept of Conscience	3

Religious Studies and Theology Minor

The Religious Studies and Theology Minor is available to students majoring in disciplines other than Religious Studies and Theology.

Students are encouraged to meet with the chair or relevant professor to design a minor that aligns with their interests. We particularly encourage minors to choose courses that integrate with their major, for example, world religions alongside international relations or courses on religion and science, biomedical issues, and the environment for science majors.

The minor requires six courses, including RST 101.

Code	Title	Credits
Required Course		
RST 101	Introduction to Religious Studies and Theology	3
Electives		
5 upper level (200 or above) RST courses		15
Total Credits		18

Social Sciences Program (AA or BS)

The social science program of courses deals with mankind's political, social, economic and psychological interrelatedness as studied in the fields of sociology, anthropology, history, political science, communication studies, economics and psychology. Students in this program develop and refine their insights into human behavior through a wide range of social observation, inquiry and study. By allowing a considerable degree of freedom in choosing electives, the program permits a meaningful flexibility not found in more restrictive curricula.

Qualifications

Students must maintain an overall 2.0 cumulative average to graduate with a degree from Canisius.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students interested in pursuing this degree at either the major or Associates level should contact an Associate Dean in the College of Arts and Sciences.

Curriculum

The associate of arts degree program in social sciences requires the completion of 60 credits of coursework. This program has two basic purposes:

1. It offers an immediate degree goal for students seeking a general introduction to the social sciences (psychology, sociology, political science, economics, and anthropology); and
2. It provides a basic foundation for those who wish to go on for a bachelor's degree.

The program contains a second track designed for the prospective business major. Students who plan baccalaureate studies in the future are encouraged to choose the track which is more appropriate for them. If a student remains at Canisius College, all of the coursework in the associate degree program is transferable and applicable to the bachelor's program.

Social Sciences Curriculum (Associate Degree)

Core Curriculum Requirements

All students complete Core Curriculum requirements as part of their overall Canisius Education. These requirements can be found at the Core Curriculum website (http://www.canisius.edu/academics/core/).

Major Course Requirements

(8 courses)

Social Sciences Track

Code	Title	Credits
Required Courses		
MAT 106	Calculus for the Non-Sciences	3
MAT 131	Statistics for Social Sciences	3
Social Science Electives		
Select three of the following area sequences:		18
ECO 101 & ECO 102	Principles of Macroeconomics and Principles of Microeconomics	
PSY 101 & PSY 102	Introduction to Psychology I and Introduction to Psychology II	
PSC 103 & PSC 104	The American Constitution and American Political Process	6
SOC 110 & SOC 111	Introduction to Sociology and Contemporary Social Problems	
ANT 121 & ANT 122	Biological Anthropology and Sociocultural Anthropology	
Total Credits		30

Business Track

Code	Title	Credits
Required Courses		
MAT 105	Finite Mathematics	3
MAT 106	Calculus for the Non-Sciences	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3
Electives		
2 courses from the business core		
Total Credits		18

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 60 credit hours for graduation. Students may graduate with more but not less than 60 credit hours.

Other Associate's Degree Regulations

The basic residency requirement for A.A. degrees is 30 credit hours, at least 15 of which must be completed in traditional classroom situations. No more than 30 credits may be transferred from another institution. Not all courses at other institutions are applicable to the associate degree, and transfer students are required to have a transfer evaluation completed by the college.

For more information contact the dean in the College of Arts and Sciences.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

(21 courses)

Code	Title	Credits
Basic Social Sciences		
Select four courses each from four of the following departments, for a total of 16 courses:		48

Anthropology:		
ANT 121 & ANT 122	Biological Anthropology and Sociocultural Anthropology	
Plus two 300/400 level courses		
Communication Studies:		
Select two of the following:		
COM 201	Oral Communication	
COM 202	Communication Theory	
COM 203	Writing for the Public Media	
COM 204	Interpersonal Communication	
COM 205	Mass Communication and Society	
COM 206	Introduction to Research Methods	
Plus two 300/400 level courses		
Economics:		
ECO 101 & ECO 102	Principles of Macroeconomics and Principles of Microeconomics	
Plus two 300/400 level courses		
History:		
HIS 123 & HIS 124	History of the United States: The Colonial Period to Reconstruction and History of the United States: 1877 to the Present	
Plus two 300/400 level courses		
Political Science:		
PSC 103 & PSC 104	The American Constitution and American Political Process	
Plus two 300/400 level courses		
Psychology:		
PSY 101 & PSY 102	Introduction to Psychology I and Introduction to Psychology II	
Plus two Psychology courses above 100 level		
Sociology:		
SOC 110 & SOC 111	Introduction to Sociology and Contemporary Social Problems	
Plus two 300/400 level courses		
Additional Courses		
Three additional 300/400 level courses in one of the chosen departments: Interdisciplinary courses may be substituted for one or more department courses		
MAT 131	Statistics for Social Sciences	3
Social Sciences Methods - Select one of the following:		3
PSC 217	Research Methods	
SOC 342	Social Research Methods	
ANT 351	Qualitative Research Methods	
Total Credits		54

Sociology (BA)

Introduction

Sociology is the study of our behavior as social beings, covering everything from the analysis of small groups to the study of global social change. We hold that social forces external to the individual play an important role in shaping behavior and beliefs. Social forces are the economic and political make-up of society, and cultural influences, such as our beliefs, habits, and values. The sociology major prepares students for a wide variety of careers and graduate fields, including sociology, social work, planning, public administration, education, public health, business, and law.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Sociology website (https://www.canisius.edu/academics/programs/sociology/).

Qualifications

Students must have a minimum grade of C in all required courses and maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in sociology.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

In addition to the Sociology minor the department also supports two interdisciplinary minors: Child, Family and Community Studies and Peace and Justice Studies.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they

provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
SOC 110	Introduction to Sociology	3
SOC 111	Contemporary Social Problems	3
HSV 303	Research Methods in the Social Sciences	3
Focused Method Option: Choose 1		3
SOC 342	Social Research Methods	
ANT 351	Qualitative Research Methods	
MAT 131	Statistics for Social Sciences	
SOC 432	Theories in Sociology	3
Six 3 credit sociology electives		18
Total Credits		33

Major Electives

A student's electives must be 6 courses from any of the designated major tracks.

Society and Culture Track

Code	Title	Credits
SOC 234	Environment and Society	3
SOC 273	Social Movements and Social Change	3
SOC 324	Visual Sociology	3
ANT 122	Sociocultural Anthropology	3
ANT 355	Sociolinguistics	3
PSC 249	Protest, Politics, & the State	3

Identity and Diversity Track

Code	Title	Credits
SOC 291	Gender and Society	3
SOC 341	Race and Ethnic Relations	3
SOC 390	Marriage and Families	3
SOC 340	Sociology of the City	3
SOC 385	International Migration	3
PSC 241	Human Rights and Globalization	3

Crime and Society Track

Code	Title	Credits
SOC 355	Deviant Behavior	3
CRJ 320	Criminology	3
CRJ 337	Violence and the Family	3
CRJ 354	Juvenile Delinquency	3

Methods and Application Track

Code	Title	Credits
SOC 315	Geographical Information Systems (GIS) for the Social Sciences	3
SOC 324	Visual Sociology	3
SOC 342	Social Research Methods (if not chosen as methods option)	3
ANT 351	Qualitative Research Methods (if not chosen as methods option)	3
MAT 131	Statistics for Social Sciences (if not chosen as methods option)	3
SOC 498	Internship	3
SOC 499	Independent Study	3

Anthropology Track

A student can choose to focus in Anthropology by choosing 5 courses. Students must choose ANT 122 and ANT 351 plus 3 electives of their choice.

Code	Title	Credits
BIO 312	Primatology	3
ANT 121	Biological Anthropology	3
ANT 122	Sociocultural Anthropology	3
ANT 351	Qualitative Research Methods	3
ANT 341	Environmental Anthropology	3
or SOC 234	Environment and Society	
ANT 355	Sociolinguistics	3
RST 221	Native American Religions	3
RST 222	African Religions	3
RST 224	Islam: Tradition and Revival	3
RST 229	Religious Perspectives on Animals	3
RST 324	Biblical Archaeology	3
RST 360	Magic, Science and Religion	3

Additional Course Considerations

The department encourages sociology majors to study a foreign language of their choice and to participate in the college study abroad program. Students considering study abroad should consult with their advisor regarding course sequencing.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
SOC 110	SOC 111
Sophomore	
Fall	**Spring**
HSV 303	SOC elective
SOC elective	
Junior	
Fall	**Spring**
Take one of the following research methods courses:	SOC elective
SOC 342	
ANT 351	

MAT 131	
SOC elective	

Senior

Fall	Spring
SOC 432	SOC elective
SOC elective	

Learning Goals & Objectives

Student Learning Goal 1

Sociology majors will demonstrate that they are able to think critically about sociological concepts.

Students will:

- **Objective A**: apply scientific methodology to the study of sociology
- **Objective B:** evaluate the quality of quantitative and qualitative research in sociology

Student Learning Goal 2

Sociology majors will demonstrate that they have the knowledge necessary for careers or graduate school.

Students will:

- **Objective A**: become familiar with the major concepts, theories, and theorists in sociology.
- **Objective B**: apply sociological theories and methods to real world situations.

Student Learning Goal 3

Sociology majors will appreciate the diverse nature of society.

Students will:

- **Objective A**: conceptualize of diversity today and in the past.
- **Objective B**: recognize of the vastness of human diversity.

Minors

- Sociology Minor (p. 245)
- Environmental Sustainability Minor (p. 243)
- Interdisciplinary Minor in Peace and Justice Studies (p. 244)
- Social Sciences Minor in Child, Family and Community Studies (p. 245)

Courses

SOC 110 Introduction to Sociology **3 Credits**
Topics include theory, methods, culture, socialization, race and ethnicity, groups and organizations, and social inequality; analysis of everyday events, using sociological imagination.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall.

SOC 111 Contemporary Social Problems **3 Credits**
Exploration of selected social problems from various sociological points of view, emphasizing some of the sociological concepts and methods employed in analyzing these problems.
Fulfills College Core: Diversity, Field 5 (Social Sciences)
Offered: spring.

SOC 234 Environment and Society **3 Credits**
Explores connections between environmental issues and their social causes and consequences. Topics of analysis include environmental racism, environmental health, risk and uncertainty, political economy, globalization and sustainability.
Fulfills College Core: Field 5 (Social Sciences)
Offered: spring.

SOC 273 Social Movements and Social Change **3 Credits**
Explores the development of social movements as a force of social change in society. Focus is on theoretical developments in movement theory, as well as explorations of social movements through history.
Fulfills College Core: Field 5 (Social Sciences), Justice
Offered: spring.

SOC 291 Gender and Society **3 Credits**
Exploration of origin of gender roles; socialization into masculine and feminine roles; intersection of gender and social institutions such as family, work and education.
Fulfills College Core: Field 5 (Social Sciences)

SOC 300 Special Topics in Sociology **3 Credits**
Critical examination of a selected topic in sociology. Subject matter determined by the instructor.

SOC 315 Geographical Information Systems (GIS) for the Social Sciences **3 Credits**
This course will introduce students to basic mapmaking skills using the program ArcGIS, and the ways that those skills can be applied to the study of human society, relationships, and environments. By the end of this course, students will know how to find or create geographic data, build a spatial data base, and analyze that data to answer specific research or predictive questions. Students will also consider the principles of cartography, design, and storytelling which contribute to an effective map, and will produce a map project by the end of the course.
Prerequisites: none.
Offered: every spring.

SOC 324 Visual Sociology **3 Credits**
Emphasizes a visual approach to analyzing social concepts. Analysis of visual media forms to explore core ideas in sociology such as gender, race, environment, social class, family and global diversity.
Offered: spring.

SOC 340 Sociology of the City **3 Credits**
Exploration of how people experience and understand city life, how cities grow and develop, and various issues affecting cities today such as suburbanization and urban sprawl.

SOC 341 Race and Ethnic Relations **3 Credits**
Focus is on issues surrounding race and ethnicity in the United States, including the social construction of race and ethnicity, prejudice and discrimination, unequal opportunity structures, and the racial/ethnic makeup of the U.S. population.
Fulfills College Core: Field 5 (Social Sciences)

SOC 342 Quantitative Research Methods **3 Credits**
Overview of the major steps in constructing social science research, from developing a research question, operationalization and measurement through quantitative data collection and analysis.
Prerequisite: minimum grade of C in MAT 131.
Offered: fall.

SOC 355 Deviant Behavior **3 Credits**
Students will explore how societies define some behaviors and characteristics as deviant as well as explanations of social deviance, how societies and groups respond to social deviance. Alternative social science theories about such behavior are compared and contrasted. Research methodologies and findings in recent social-science literature are examined and interpreted.

SOC 385 International Migration **3 Credits**
This course is an examination of the issues arising from the movement of peoples across national boundaries, including labor migration, illegal migration, forced migration, and trafficking.
Prerequisite: SOC 110. **Restrictions:** Junior or Senior standing.
Offered: every other fall.

SOC 390 Marriage and Families **3 Credits**
Covers family development from relationship formation through marriage, divorce and remarriage. Includes sexuality, sexual orientation, cohabitation, parenting and the intersection between the family and major social institutions.

SOC 432 Theories in Sociology **3 Credits**
Course emphasizes theory development as a tool to understand society. Focuses on major social theorists and their contributions as well as classical and modern theoretical schools in sociology.
Restriction: must be a sociology major or minor with senior standing.
Offered: every fall.

SOC 461 Sociology Capstone **1 Credit**
Integrating experience for majors; focus is on demonstrating proficiency in the discipline and preparation for post-graduate studies or employment.
Offered: spring.

SOC 498 Internship **2-4 Credits**
Opportunity for students to participate in the daily work of an agency or organization. Internships require an application and approval by the associate dean.
Prerequisite: minimum GPA of 2.75, signature of instructor, and approval by both the chair & associate dean.
Offered: fall & spring.

SOC 499 Independent Study **1-3 Credits**
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: fall & spring.

Anthropology Minor

Anthropology is the study of people and how they interact with each other and their environments. It is concerned with all institutions of all societies and is distinguished from other social science disciplines by its emphasis on differences in and between cultures. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Sociology website (https://www.canisius.edu/academics/programs/sociology/). Students interested in anthropology may pursue a sociology major and choose a series of courses (as available) from the Anthropology Track options to focus in this area or may choose an Anthropology minor

Many students who are interested in anthropology find it desirable to combine it with a major in another department such as biology, classics, fine arts, history, psychology, political science, modern languages or communication studies. To provide for maximum flexibility of scheduling, students interested in dual majors should consult with a member of the department to arrange their individual schedules.

Curriculum

The Anthropology Minor consists of 5 courses:

Code	Title	Credits
ANT 121	Biological Anthropology	3
ANT 122	Sociocultural Anthropology	3
ANT 230	Introduction to Archaeology	3
ANT 310	Codebreaking	3
or ANT 355	Sociolinguistics	
ANT Elective [1]		3
Total Credits		15

[1] Students may choose any Anthropology (ANT) course or one of the following: BIO 312, CLS 209, RST 221, RST 224, RST 324, RST 360, SOC 234, SOC 273, or SOC 315.

Students must complete the minor request form.

Environmental Sustainability Minor

Environmental concerns are more pressing than ever before. We find ourselves challenged to find ways to sustainably engage the natural resources of our planet in ways previously unheard of. This minor offers students the opportunity to engage issues of sustainability between multiple disciplines in order to reach a breadth of understanding of the complexities of these issues. Paired with any number of our undergraduate majors, the interdisciplinary minor in environmental sustainability prepares students to critically think and evaluate complex issues facing our society.

Our Minor in Environmental Sustainability engages multiple definitions of sustainability pertaining to the tensions between profit, planet, and people. Students will seek to engage ideas that critically apply principles of sustainability to professional and disciplinary, as well as daily-life. We expect that students will express ideas or proposals related to sustainability for different audiences and be able to students demonstrate proficiency in sustainability-related research and writing.

This minor is available to students in any major, however, to receive this minor, students must complete 3 courses for the minor that do not count towards their major(s) or any other minors.

Curriculum

Code	Title	Credits
CHM 104	Energy, Environment, and Society	3
SOC 234	Environment and Society	3
PHI 244	Environmental Ethics	3
EVST 110	Science of Environmental Problems I	3
or BIO 360	Environmental Health	
2 additional sustainability electives		6-8
Total Credits		18-20

Sustainability Electives

Students must take two of the following courses

Code	Title	Credits
ABEC 333	Conservation Behavior	3
ABEC 335	Conservation Education	3
ABEC 341	Urban Ecology	3
ABEC 342	Animal Geographies	3
ABEC 405	Field Studies in Political Ecology & Wildlife Conservation	3
ANT 341	Environmental Anthropology	3
BIO 320	Field Ecology	4
BIO 322	Conservation Biology	3
BIO 375	Community Ecology	3
BIO 377	Freshwater Biology	4
BIO 477	Plants and Society	3
COM 348	Environmental Communication	3
ENT 314	Social Entrepreneurship and Sustainability	3
EVST 111	Science of Environmental Problems II	3
EVST 275	Global Environmental Problems	3
HON 352	Water and Society	3
HON 354	Science in the 21st Century	3
MAT 345	Climate and Sustainability	3
PHI 247	Food and Agricultural Ethics	3
MGT 350	Strategic Sustainable Development	3
MGT 430	Sustainability and Supply Chains	3
PHI 264	Justice & the Environment: The Problem of Climate Change	3
PSC 360	Political Economy of the Developing World	3
RST 342	Theological Ethics and Environmental Justice	3
SOC 273	Social Movements and Social Change	3

Interdisciplinary Minor in Peace and Justice Studies

Director: Erin Robinson, PhD

The Department also supports the interdisciplinary minor in Peace and Justice Studies. Students can benefit from both the global and local focus while pursuing studies of human rights and social justice. Our "Justice in Action" approach helps students apply social science and humanities perspectives to address our world's most pressing social concerns. For more information please see the Peace and Studies website. (http://www.canisius.edu/sociology/courses/peace-justice-studies/.html)

The minor in Peace and Justice Studies is intended to further the mission of the College by preparing students for their role as leaders in the local and global community. Students pursuing this track of the Minor will develop skills, knowledge, and perspective to pursue "Justice in Action." The program's focus is on the religious, social science, and humanities perspectives needed to address peace and justice topics.

Components of the Minor and Advisement Notes

This minor requires that students complete 6 courses and a capstone (described in the Curriculum).

Required Courses: It is recommended that the two required major courses be taken towards the beginning of a student's academic career; however, these courses are not intended to serve as prerequisites for the rest of the program.

Major Electives: Students must choose a methods course if one is not required by their major department. If students choose an additional religious studies course, they must choose a course from a perspective different from the selection in the foundation course, i.e.: Elective should be focused on a non-Christian perspective if they choose RST 340 Moral Issues Today, and vice versa. It is recommended that students take a modern foreign language.

Major Capstone Course: A senior level capstone course will be required of all students. This seminar-style course will be taught by faculty involved in the program and will address all three aspects of Ignatian Pedagogy: experience, reflection, and action.
The requirement for the Capstone Course will be a Capstone Immersion Experience. It will require students to:

- Collectively identify a Peace and Justice issue in the local or global community
- Through a group initiative, develop an action plan to assist the organization and community in its efforts to resolve the issue
- All students will be working with the same organization, as this will be a team approach to their service experience. Students will spend the majority of their course time in the field gaining direct experience with the community. Other course time will be devoted to group discussion and reflection with appropriate academic readings.

Maintaining an Electronic Portfolio: In the majority of courses completed for this program, students will be required to do a course assignment on an issue of peace and justice in today's world. Through the Desire2Learn (D2L) portfolio tool, students will maintain a multi-year electronic portfolio of these assignments to enhance their learning. Students should maintain a collection of 7-10 assignments that reflect their progress in the program.

Curriculum

Code	Title	Credits
Required Courses		
SOC 273	Social Movements and Social Change	3
RST 340	Moral Issues Today	3
or RST 220	Introduction to Eastern Religions	
Elective Courses		
Skills (select one of the following):		3
ANT 351	Qualitative Research Methods	
COM 201	Oral Communication	
COM 204	Interpersonal Communication	
COM 302	Small Group Communication	
ECO 311	Metropolitan Economic Development and GIS	
HSV 303	Research Methods in the Social Sciences	
PSY 329	Leadership and Motivation	
SOC 342	Quantitative Research Methods	
Local Perspective (select one of the following):		3
SOC 111	Contemporary Social Problems	
SOC 340	Sociology of the City	
URS 237	State & Local Politics	
HIS 382	New York State History	
SOC 300	Special Topics in Sociology	
IGSR 300	Immersion East Side Seminar	

Global Perspective (select one of the following):		3
ANT 122	Sociocultural Anthropology	
RST 341	Catholic Social Ethics: Theological Perspectives	
RST 347	Ecotheology	
IGSR 302	Jesuits in Argentina	
IGSR 306	Faith/Justice/Globalism in Phi	
IGSR 307	Faith, Culture, Ed in Tanzania	
Major Capstone Course		3
Total Credits		18

Social Sciences Minor in Child, Family and Community Studies

This social science interdisciplinary minor is co-sponsored by the Department of Psychology and the Department of Sociology, Anthropology and Criminal Justice. It is intended for students seeking a deeper understanding of the dynamics of family relations and the interaction of the family with society. A minor in Child, Family, and Community Studies is useful for individuals interested in collaborative activities designed to improve the well being of children, adults, and families. Issues that may typically be dealt with by people interested in this minor include unemployment, drug and alcohol abuse, child abuse and neglect, domestic violence, juvenile delinquency, and an urban school system that is unable to address the complex needs of the students it serves.

This minor is geared toward students interested in pursuing graduate studies in Social Work (MSW), Counseling Psychology, School Psychology, or Counseling Education. Its mission is to prepare undergraduate students for careers and future graduate studies in the fields of education, social work and social services. Embedded within the interdisciplinary focus of the minor is an emphasis on creating reflective and compassionate practitioners who are committed to the Jesuit ideal of men and women with and for others.

Curriculum

A total of 7 courses is needed for this minor.

Code	Title	Credits
Select two from the following list:		6
PSY 101	Introduction to Psychology I	
PSY 102	Introduction to Psychology II	
SOC 110	Introduction to Sociology	
COM 204	Interpersonal Communication	
Select two from the following list		6
PSY 334	Child, Family and Community Psychology	
COM 304	Family Communication	
CRJ 337	Violence and the Family	
Select three courses with one chosen from each of the following areas and with two of the three from outside of the students major		
Area A: Children		3
EDE 100	Human Growth and Development - Birth through Childhood	
EDS 101	Human Growth and Social Development: Adolescence	
PSY 203	Lifespan Developmental Psychology	
PSY 384	Child & Adolescent Psychopathology	
COM 385	Media & Children	
Area B: Family		3
CRJ 354	Juvenile Delinquency	
HSV 201	Introduction to Family Dynamics	
SOC 390	Marriage and Families	
Area C: Community		3
SOC 111	Contemporary Social Problems	
COM 350	Health Communication	
PSY 370	School Psychology	
SOC 341	Race and Ethnic Relations	
HSV 302	Children, Schools, and the Community	
Total Credits		21

Note: Students must complete 15 hours of volunteer/service learning to complete the requirements for this minor

Sociology Minor

The Sociology minor is an opportunity for students to engage in the field through the taking of 5 classes that provide an overview of the primary areas in sociology.

Code	Title	Credits
SOC 110	Introduction to Sociology	3
SOC 111	Contemporary Social Problems	3
3 SOC Electives (2 must be at the 300-400 level)		9
Total Credits		15

Specialized Studies (BS)

Introduction

Specialized Studies enables students to develop their own majors and degree plans by combining courses from different departments to create a focused outcome. Students who find that Canisius does not offer majors that match their interests, talents, future goals and employment niches may propose their own plans of study based on existing coursework. A student does this by seeking the assistance of the associate dean and two faculty members to assist with creating a plan of study and goal counseling.

Approval Criteria

This program is available to any Canisius student who wishes to create her/his own field of study, has a cumulative GPA of 2.5 or better, and has secured the approval of at least two faculty members who will support their plans. Incoming students who plan to create a specialized major should matriculate as undeclared and may begin working with an academic advisor and/or a faculty member after the completion of their first semester to start the proposal process. Creating a sound proposal will require:

- An in-depth explanation of future and career goals as well as learning objectives as they relate to the proposed Specialized Studies major.
- An exact list of proposed courses including a detailed narrative outlining the rational regarding their relation to each other and the student's future goals.
- Two letters of support from Canisius faculty members. The letters should state why this specialized plan makes sense for this student and why the college should have confidence that the student can complete the plan.
- One of the above faculty members must, in writing, agree to be the academic advisor for the student and work with the student to develop

a senior project that is relevant to the coursework and intended learning goals.
- A detailed timeline for completion. Prerequisites, sequencing and course offerings must be taken into consideration.

Students shall submit the proposal to their designated faculty advisor, who will submit it and letters of support (see above) for final approval by the appropriate dean(s). If it becomes necessary to adjust the plan, changes must be discussed with and agreed upon by the faculty advisor.

Time to Completion

As with any major, Specialized Studies requires a minimum of 120 credit hours and a cumulative GPA of 2.0 or better for graduation.

Questions

Please direct any questions about the Specialized Studies major to the Dean of Arts & Sciences.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Specialized Studies Courses

- 36 credits minimum in the Specialized Studies Curriculum
- 21 of these credits must be upper level courses (300-400 level - graduate courses may also be considered).
- 3 credits: Senior Project (see below for details).

Note: If a chosen course requires a pre-requisite the student must include this in the plan. No pre-requisite courses are to be waived.

Senior Project

Under the direction of a faculty member, the student must undertake an independent scholarly or creative senior project that is submitted, exhibited, completed, or performed no later than the last day of classes. The project will be subject to peer and professional review in methods appropriate for the fields of endeavor as required by the advisor and faculty member. The student should work with the faculty member to develop a project proposal no later than week six of the semester prior to degree completion (i.e. around November 1st for May graduation).

Learning Goals & Objectives

These are developed as part of the proposal for majoring in Specialized Studies.

Urban Studies (BA)

Director: Kevin R. Hardwick, PhD

Introduction

The urban studies major at Canisius provides students with a variety of approaches and tools that enable them to effectively analyze the 21st century urban center. The coursework examines the social, legal, economic, ethnic and political forces that affect cities and towns, from the challenges of the public education system to housing and real estate development, crime, health issues, human services and transportation. The specialized program helps students understand economic growth and decline, racial and ethnic issues, community development, and other factors that influence the growth and prosperity of a city.

The program offers a solid preparation for graduate programs in public administration, community development and planning, social work, public policy, criminal justice and urban affairs. It is also a recommended choice for pre-law students and for those aspiring to careers in journalism, communications, teaching, government service, social work, law enforcement, community organization and land-use planning, as well as in those industries that are increasingly conscious of the influence of urban society upon them and their impact on urban society. Extensive internship and professional research experiences are an integral component of the urban studies program. Such activities are a vital aspect of preparation for graduate school and/or a professional career. Because the program is designed to be one half of a dual major, students who choose urban studies must also select a second major in another discipline such as criminal justice, economics, political science, history, sociology or anthropology. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Urban Studies website (https://www.canisius.edu/academics/programs/urban-studies/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Urban Studies. Students must also have a second major.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Dual Majors

Because the Urban Studies Major is designed to be one half of a dual major, students who choose urban studies must also select a second major in another discipline such as criminal justice, economics, political science, history, sociology or anthropology. The decision to complete a dual major may be based on career goals or planned graduate studies. Before a student declares a dual major it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can

be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
PSC 104	American Political Process	3
ECO 102	Principles of Microeconomics	3
PSC 237	State and Local Politics	3
PSC 334	Public Administration	3
PSC 336	Urban Government and Politics	3
Select one of the following:		3
HIS 382	New York State History	
HIS 396	Politics and Society in American Film	
HIS 460	The Life and Times of Theodore Roosevelt	
HON 217	Cities, Suburbs, and Spaces	
Select one of the following:		3
ECO 310	Introduction to Geographic Information Systems	
ECO 311	Metropolitan Economic Development and GIS	
ECO 411	State and Local Finance	
URS 400	The Urban Challenge	1
Urban Studies Electives (choose 3 from the list below)		9
Total Credits		31

Major Electives

Urban Studies Electives: three courses to be chosen from the following

Code	Title	Credits
CRJ 227	Criminal Justice I	3
ECO 101	Principles of Macroeconomics	3
ECO 310	Introduction to Geographic Information Systems	3
ECO 311	Metropolitan Economic Development and GIS	3
ECO 411	State and Local Finance	3
FAH 109	History of Architecture	3
HIS 382	New York State History	3
HIS 396	Politics and Society in American Film	3
HIS 460	The Life and Times of Theodore Roosevelt	3
HSV 303	Research Methods in the Social Sciences	3
PSC 103	The American Constitution	3
PSC 104	American Political Process	3
PSC 215	National Issues and Public Policy	3
PSC 225	U.S. Presidency	3
SOC 111	Contemporary Social Problems	3
SOC 340	Sociology of the City	3
URS 498	Urban Internship	3

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
PSC 104	ECO 102
Sophomore	
Fall	**Spring**
PSC 237	PSC 336
Junior	
Fall	**Spring**
Select one of the following:	PSC 334
HIS 382	URS Elective
HIS 396	
HIS 460	
Senior	
Fall	**Spring**
Select one of the following:	URS 400
ECO 310	URS Elective
ECO 311	
ECO 411	

Learning Goals & Objectives

Student Learning Goal 1

Urban Studies majors will develop knowledge of urban history, economics and politics.

Students will:

- **Objective A:** Demonstrate competency with the conceptual frameworks of urban history;
- **Objective B:** Demonstrate competency with conceptual frameworks of urban economics;
- **Objective C:** Demonstrate competency with conceptual frameworks of urban politics.

Student Learning Goal 2

Urban Studies majors will be able to communicate and work effectively with others.

Students will:

- **Objective A:** Successfully complete a project in concert with others;
- **Objective B:** Communicate effectively in writing both reports and memos;
- **Objective C:** Communicate effectively in speaking.

Courses

URS 400 The Urban Challenge **1 Credit**

The culmination of the Urban Studies Program. This course is normally taken during a student's final semester and serves to reinforce connections among various disciplines.

Offered: spring.

URS 498 Urban Internship **3 Credits**

Participant observation and evaluation of an urban program or agency. Students devote 10 hours per week to significant activities related to their skills and interests. Internships are by application only and must be approved by the associate dean.

Prerequisite: permission of the chair & associate dean. **Restriction:** placement by urban studies director.

Offered: fall & spring.

Women & Gender Studies Minor

Co-Director: Johanna Fisher, Adjunct Professor
Co-Director: Tanya Loughead, PhD, Professor

The Women & Gender Studies Minor provides an integrated approach to understanding the social, political, and cultural constructions of gender that shape the experiences of women and men. The curriculum offers a solid foundation in critically thinking through the relationships of identity and power and in critically examining and judging the oppressions and injustices that surround us. The Minor thus educates students in becoming "women and men with and for others."

Fr. Pedro Arrupe, SJ, famously proclaimed that Jesuit education should aim to be "education for justice" and that students should become "able to perceive the serious injustices which are building around the world of men and women in a network of domination, oppression and abuses" that "stifle freedom." The Women & Gender Studies Minor takes Fr. Arrupe's call for an education for justice as one of the key features of its mission. Women & Gender Studies courses prepare students for meaningful careers — certainly — but more importantly prepare students for engaging in ethical and just relationships with everyone.

The Women & Gender Studies Minor is an excellent preparation for public-service careers, and is especially useful in any field where understanding diversity is a requirement — though certainly understanding diversity is important in every field and walk of life. Additionally, the minor prepares students for graduate study in social work, law, business and human resources, counseling, and many other fields. The Women & Gender Studies Minor can usually be combined with other majors in order for students to pursue their goals. Please check with your advisors, especially the Women & Gender Studies Co-Directors, to see how either the minor works with your desired academic status and goals. For a more detailed description of the program, courses, faculty, academic and co-curricular opportunities please go to the Women & Gender Studies website (https://www.canisius.edu/academics/programs/women-and-gender-studies/).

Students who complete the Women & Gender Studies Minor often go into fields where the knowledge of human diversity is respected. Recent Canisius College Women & Gender Studies graduates are in careers such as: law, government and non-profit work, literature and the arts, philosophy, social work, education, counseling, human resources, community organization, medicine, and journalism. Graduates of the program are currently in graduate schools in the following areas:

- PhD in International Law
- PhD in English
- MD
- MBA
- MA in Art History
- MS in Social Work
- MA in Gender Studies
- PhD in Sociology
- PhD in Human Rights Law

Advisement

All students should meet with one of the Women & Gender Studies Co-Directors as well as Women & Gender Studies faculty in discussing career expectations, choosing their electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Curriculum for the Minor

The Women & Gender Studies courses emphasize how gender roles are created and how they impact what we know and how we act in the world. Students are encouraged to explore the complexities of our gendered world in a structured series of courses. Learning objectives for the Women & Gender Studies Minor focus on gender, justice and oppression, power, and cultural diversity.

The Women & Gender Studies Minor consists of:

Code	Title	Credits
WST 201	Introduction to Women and Gender Studies	3
Four pre-approved Women & Gender Studies courses		12
Total Credits		15

Examples of Women and Gender Studies courses include:

Humanities

Code	Title	Credits
CLS 300	Roman Law and Society	3
ENG 223	Images of Women in Literature and Film	3
ENG 306	Eighteenth Century Literature	3
ENG 368	Native American Literature	3
ENG 373	Jane Austen	3
ENG 382	African American Literature	3
ENG 381	Postcolonial Literature	3
FAH 159	Gender, Identity, and Art	3
FAM 213	Women in Music	3
HIS 211	Women In The Western World	3
HON 358	Women and Religion	3
PHI 240	Justice	3
PHI 272	Gender and Philosophy	3

PHI 273	Race and Philosophy	3
PHI 274	Social and Political Philosophy	3
PHI 275	Global Feminisms	
PHI 285	Black Philosophy	3
PHI 379	Contemporary Women Philosophers	3
RST 340	Moral Issues Today	3
RST 345	Bio-Moral Problems	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 459	The Body Erotic/The Body Politic: Sexuality as Political Discourse in Latin America and Spain	3
SPA 453	Almodóvar and La Movida: The Films of Pedro Almodóvar	3

Social & Natural Science

Code	Title	Credits
ANT 365	Gender Issues in Language	3
BIO 221	Biology of Women	3
COM 304	Family Communication	3
COM 327	Gender Differences in Human Communication	3
CRJ 337	Violence and the Family	3
CRJ 359	Women and Crime	3
PSY 318	Social Psychology	3
SOC 273	Social Movements and Social Change	3
SOC 291	Gender and Society	3
SOC 390	Marriage and Families	3

Learning Goals & Objectives

Learning Goal 1

Students will be original thinkers who can re-envision how gender roles interact with social structures, time, race or ethnicity.

Students will:

- **Objective A**: Distinguish the difference between sex and gender;
- **Objective B**: Interpret the ways social structures (such as religion and social class) impact women and men's lives;
- **Objective C**: Explain how historical context interacts with gender roles;
- **Objective D**: Examine how race or ethnicity interacts with gender roles;
- **Objective E**: Analyze how socially-constructed gender norms influence power relationships experienced by individuals.

Learning Goal 2

Students will be problem solvers who investigate culture and society using the lens of gender and social justice.

Students will:

- **Objective A**: Evaluate human interactions using gender as a framework;
- **Objective B**: Apply gender-bases analysis to offer solutions to issues in society and culture.

Courses

Please note that because this minor is interdisciplinary, most courses are offered in other departments. In the online catalog, you can look at course descriptions using the course bubbles in the minor's curriculum.

WST 201 Introduction to Women and Gender Studies **3 Credits**

This course places the experiences of women and men at the center of our study by introducing basic concepts and perspectives in the field of women and gender studies. We further focus on the ways in which gender interacts with race, class, sexual orientation, and ethnicity.

Fulfills College Core: Field 5 (Social Sciences)

Richard J. Wehle School of Business

Richard J. Wehle School of Business

Denise M. Rotondo, PhD, Dean; Laura A. McEwen, Assistant Dean and Director, Graduate Business Programs; Sara Vescio, Executive Director of the Women's Business Center; Jennifer M. Patrick, Director of Executive Education and Leadership Development.

Bagen Hall 205 | 2001 Main Street | Buffalo NY 14208 | 716-888-2160 | Fax: 716-888-2145

Visit us on the Richard J. Wehle Business School webpage (https://www.canisius.edu/academics/our-schools/richard-j-wehle-school-business/).

OUR MISSION

The Richard J. Wehle School of Business (WSB) develops career ready-business leaders who are prepared to make ethical business decisions that reflect the interests of multiple stakeholders.

With our partners in the Western New York business community, we emphasize immersive, experience-based learning activities that reflect the interconnected and global nature of business.

Faculty are committed to excellence in teaching, scholarship, and professional engagement with an emphasis on improving and informing business practices.

In accordance with our Jesuit tradition, we are committed to educating the whole person, to using our skills in the service of others, and to a business work ethic of doing more and going beyond what is expected.

OUR VISION

Leveraging our national rankings in accounting and finance, we will be recognized as the premier business school in Western New York by combining innovative learning activities involving real business problems with intensive leadership development rooted in Jesuit values. We will be recognized as thought leaders in the transformation of business in our region, and we will be a provider of choice among our alumni and the business community for continued professional development.

OUR LEARNING GOALS

We are committed to developing professionals who have depth of expertise in business functions combined with breadth of leadership and professional skills for success in today's dynamic business environment. Our graduates will:

- Understand ethical behavior and sustainability concepts.
  - Canisius graduates will be able to identify principled and ethical solutions to business problems.
  - Canisius graduates will be able to assess the potential social, economics, and environmental impact of business decisions on relevant stakeholders.

- Make well-informed business decisions by demonstrating the ability to identify and solve business problems through quantitative and qualitative reasoning.
  - Canisius graduates will be able to interpret data, employ quantitative reasoning, and apply appropriate analytical tools to derive data-driven decisions.
  - Canisius graduates will be able to evaluate and incorporate contextual information in the decision-making process [and generate positive solutions].
- Understand how functional areas of business impact business strategy.
  - Canisius graduates will understand how functional areas impact business strategy, and give examples as to how decisions in these areas can be structured to improve organizational performance and positively impact all stakeholders.
- Be career-ready professionals who are prepared to lead.
  - Canisius graduates will articulate career goals, prepare a professional resume, demonstrate behavior-based interviewing techniques, and develop a professional network.

AACSB Accreditation

The Richard J. Wehle School of Business is accredited by the Association to Advance Collegiate Schools of Business International (http://www.aacsb.edu/) (AACSB). Accreditation by AACSB is the hallmark of excellence in management education, and has been earned by less than five percent of the world's business programs. It represents the highest standard of achievement for business schools worldwide. Programs receiving AACSB International accreditation have superior faculty, high-caliber teaching, and meaningful interaction between students and faculty. All students majoring in business are required to participate in assessment exercises appropriate for meeting accreditation requirements.

Academic Programs & Departments

The Richard J. Wehle School of Business offers curricula leading to premium undergraduate degree programs. You can view a complete listing of the undergraduate business and dual-degree programs by clicking on the Programs tab at the top of this page. Students can earn dual majors using two or more business majors or a combination of business and non-business majors from outside the Wehle School of Business.

Our departments are:

- Accounting
- Economics & Finance
- Management
- Marketing & Information Systems

Beta Gamma Sigma

The Wehle School of Business at Canisius College houses a chapter of Beta Gamma Sigma (https://www.betagammasigma.org/). Beta Gamma Sigma is the premier honor society recognizing business excellence. Lifetime members of the Society have earned the right to be considered the "Best in Business." Juniors and Seniors must rank in the top 10% of the class, and graduate students who graduate in the top 20 percent are eligible for membership.

Professional Student Organizations

The WSB sponsors a number of professional student organizations that provide a range of professional development opportunities for students preparing for careers in business. These organizations host workshops, seminars, networking events and tours of local businesses. Many of the student groups engage in community-based projects, using their business skills to help others and create a positive impact on the local economy. Some of the groups participate in competitions with other colleges from across the country. These competitions give students an opportunity to develop their skills and gain national recognition. The professional student organizations in the Wehle School of Business have been recognized by a number of external industry groups for their exceptional programming, leadership and success in competitions. Students are encouraged to become active in a professional student group early in their college career. Current student groups include:

- Accounting Society
- American Marketing Association (AMA)
- APICS - The Premier Professional Association for Supply Chain Management
- Canisius Entrepreneurs' Organization (CEO)
- Canisius International Business Association (CIBA)
- Enactus
- Golden Griffin Fund (GGF)
- Society for Economics & Finance
- Society for Human Resource Management (SHRM)

External Business Programs

Center for Professional Development

The WSB houses the Center for Professional Development (CPD), which delivers executive education and lifelong learning opportunities for individuals and businesses throughout the Western New York region and beyond. The CPD's diverse program options provide individuals with opportunity to advance their career, regardless of role or experience. Led by distinguished Faculty at Canisius College as well as by Western New York business experts, the CPD's programs are targeted at enhancing the skills leaders require to be successful in today's business climate. Located on the Main St. campus of Canisius College in Science Hall, many of the non-credit bearing seminars, professional development workshops, training and other programs offered by the CPD are open to enrollment by students, alumni and members of the community. For additional information and a listing of CPD programs and upcoming events, visit the official CPD website (http://canisiuscpd.com/).

The Women's Business Center

Located in Science Hall, the Women's Business Center (WBC) empowers entrepreneurs to succeed through education, connections and community by developing leaders, fostering opportunities and building collaboration. The WBC was established by the Richard J. Wehle School of Business in 2003 to support the success of entrepreneurs and small business owners with a focus on women in Erie County and the surrounding region including Buffalo, Rochester, Jamestown and Niagara Falls. The WBC provides services in small business development: training, counseling, coaching, and networking. Networking serves as a major component of all programs to ensure that every participant has made appropriate connections with business and community resources. Faculty and students at Canisius frequently connect with area entrepreneurs and small businesses through programs offered by the Women's Business Center. These connections often result in mutually beneficial relationships that contribute to the economic strength of the local and regional economy. For additional information and a listing of WBC programs and upcoming events, visit the official WBC website (http://thewomensbusinesscenter.com/).

Undergraduate Majors & Departments

Majors	Department
Accounting (120 Hr.) & Professional Accounting (150 Hr.)	Accounting
Accounting Information Systems	Accounting
Economics	Economics/Finance
Entrepreneurship	Management
Finance	Economics/Finance
International Business	Management
Management	Management
Marketing	Marketing & Information Systems

In addition, dual majors are available in these areas or in combination with other majors outside the Wehle School of Business.

Undergraduate Minors & Departments

Minors	Department
Business Management Minor (for majors outside the Wehle School of Business)	Management
Economics Minor	Economics & Finance
Entrepreneurship	Management
Global Logistics and Supply Chain Management Minor	Management
Human Resources Management Minor	Management
Information Systems Minor	Marketing & Information Systems

The Wehle School of Business also offers graduate programs that lead to the degrees of Master of Business Administration (MBA), Master of Business Administration – Accounting (MBAA), Master of Business Administration in Professional Accounting (MBAPA), and a Master of Science in Finance. These degrees are described in the Graduate Catalog (http://catalog.canisius.edu/graduate/wehle-school-business/).

BS/BA and MBA or MBA in Professional Accounting (MBAPA) Dual Degree Program

Contact: Laura McEwen, Assistant Dean and Director of the Graduate Business Programs
Bagen Hall 205B | 2001 Main Street | Buffalo NY 14208 | 716-888-8280 | mcewenl@canisius.edu

For additional information, visit the Dual Degree webpage (http://www.canisius.edu/economics-finance/overview/babs-mba-dual-degree/).

Program Description

Canisius students only.

This program enables qualified students in most majors to earn an undergraduate degree and a Master in Business Administration (MBA) within a five-year period or an MBAPA in six years. During the first three years, students take courses to fulfill their core curriculum and major-area requirements, saving electives for their senior year. In their senior year, students complete their undergraduate requirements and use free electives to take a series of introductory graduate courses. They complete the MBA requirements in the fifth year. Students with AP credits or transfer credits may be able to complete the program in less than five years.

BS/BA Dual Degree Admission

Application is made by students in the spring semester of their junior year. Admission to the program will require meeting current MBA admission standards.

Business Core

All business majors at Canisius College take a common set of courses designed to provide students with a breadth of business knowledge and skills. Upon completion of the business core, students should understand and appreciate the importance of several functional business areas and how these areas contribute collectively to the performance of organizations. In today's business environment, managers are frequently expected to work in cross-functional teams, understand how their specialty contributes to the overall mission and strategy of the organization and eventually advance to positions of leadership that require an understanding and appreciation for multiple divisions within an organization. As you will see in the curriculum tab, the common set of business courses known as the Business Core provides a strong, multi-faceted foundation that prepares students to become leaders in their organizations and excel in the globally competitive marketplace.

BUSINESS EXPLORATION [bus-x]

BUS-X is an innovative, three-part series to build career-ready business professionals. By completing the BUS-X program, students will:

- explore career options and pathways into various professionals
- experience a business immersion challenge to learn how the functional areas of business combine to achieve overall goals
- develop job search skills
- network with business professionals, alumni, and community leaders
- gain valuable hands-on practical experience, such as internships, consulting projects, or approved service-learning activities

All students majoring in the Wehle School of Business are required to complete BUS-X in order to graduate.

Freshman Year - *Explore Business*

- exploring majors and careers

Sophomore Year - *Explore Careers*

- informational interviews
- resumes, interview skills, mock interviews

Junior/Senior Year - *Business in Action*

- hands-on, real business experience
- internships
- student consulting projects
- Golden Griffin Fund and CFA Research Challenge
- Enactus
- approved service learning, volunteer, study abroad

Code	Title	Credits
Select one of the following options for satisfying the mathematics requirement: [1]		4-6
Option 1: A two course sequence of math courses:		
MAT 105	Finite Mathematics	
MAT 106	Calculus for the Non-Sciences	
Option 2: Select one of the following advanced math courses:		
MAT 109	Calculus with Review I	
MAT 111	Calculus I	
MAT 115	Calculus for Business	
Business Courses		
ISB 101	Management Technology	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
MGT 101	Introduction to Management	3
ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting [2]	3
MKT 201	Principles of Marketing	3
FIN 201	Introduction to Corporate Finance	3
ECO 255	Business Statistics	3
ECO 256	Business Analytics	3
MGT 325	Operations Analysis for Business [3]	3
MGT 370	Managerial Environment [4]	3
MGT 446	Managerial Policy/Strategy [5]	3
Business International Requirement (See Description Below) [6]		6
Must be completed by all business major [7]		
BUSX 101	Business in Action 1	
BUSX 102	Business in Action 2	
BUSX 201	Explore Careers	
Total Credits		49-51

1 For economics, business economics, finance and accounting students, MAT 115 is recommended over other options. However, students who are not well prepared in mathematics may wish to take MAT 105 and MAT 106 before moving on to more advanced math courses. Additional mathematics courses are recommended if the student is preparing for a graduate program in economics or finance. The student should consult a departmental advisor.

2 Accounting Majors take ACC 212 instead of ACC 202

3 Management Majors take MGT 335 and MGT 336 instead of MGT 325; Students completing the 150-hour combination of BS and MBA in Accounting take MBA 507 instead of MGT 325

4 Accounting Majors take LAW 371 and LAW 372 instead of MGT 370

5 Students completing the 150-hour combination of BS and MBA in Accounting take MBA 690 instead ofMGT 446

6 International business majors will satisfy the Business International Requirement by taking two semesters of a foreign language at the 200 level.
Other business majors will fulfill the two courses required for the Business International Requirement with either a foreign language or a non US history course.
- Non US History courses can be in two separate international cultures
- Two separate international language courses
- A combination of an international language course and a non US history course

7 BUSX is required of all business majors and must be completed for degree requirements. This series of courses are 0 credit hours and will be graded pass/fail. BUSX 101 will be completed in your first semester freshman year, BUSX 102 will be completed in your second semester freshman year, and BUSX 201 will be completed as a sophomore.

Business International Requirement

The Business International Requirement is part of the business core curriculum and is designed to help prepare students for doing business in an increasingly global economy. Note that American Sign Language and classical or ancient languages such as Greek and Latin do not satisfy the Business International Requirement. The list of non-U.S. culture classes that satisfy the requirement is updated regularly and can be obtained from your advisor or department chair. As an alternative to modern language or non-U.S. culture classes, students can satisfy the Business International Requirement by participating in a semester-long study abroad program.

Business Core Learning Goals and Objectives

Student Learning Goal 1: BSBA graduates will have a fundamental knowledge and understand the value chain for goods and services.

- Objective A: Understand the creation of value through business processes integrating production and distribution of goods and services.
- Objective B: Students will be able to apply the concept of the marketing mix for goods and services when describing an organization's marketing strategy.

Student Learning Goal 2: BSBA graduates will have fundamental analytical and quantitative skills.

- Objective A: Demonstrate critical thinking and problem solving skills.
- Objective B: Have sufficient mastery of statistical applications to conduct and interpret statistical analyses.
- Objective C: Have sufficient mastery of management science applications to conduct and interpret analyses.
- Objective D: Perform and interpret standard accounting and financial computations and analysis.

Student Learning Goal 3: BSBA graduates will have a fundamental knowledge of global human behaviors and market structures.

- Objective A: Demonstrate awareness of how cultural differences and human diversity impact business decisions.
- Objective B: Demonstrate an understanding of the market structure, macroeconomic and international environments within which businesses operate, including the roles of financial institutions, the central bank, and the government.

Student Learning Goal 4: BSBA graduates will know ethical frameworks in managerial decision-making and leadership.

- Objective A: Demonstrate knowledge of different approaches to ethical decision making, and how they apply to different business situations in a socially responsible manner;
- Objective B: Demonstrate an understanding of fundamental issues such as conflicts that may arise among the stakeholders of a firm,

management's fiduciary responsibility and issues of corporate governance

- Objective C: Describe issues pertaining to social responsibility and sustainability.
- Objective D: Identify situations when ethical leadership is required.

Student Learning Goal 5: BSBA graduates will know and understand appropriate uses of Information Systems.

- Objective A: Understand the use of information technology as a tool for communication, management, and business problem solving.
- Objective B: Use applications software to effectively locate, extract, generate and organize the needed information to assist in management decision-making.
- Objective C: Effectively research, locate, extract, structure, and organize the information needed to assist in decision making.

Student Learning Goal 6: BSBA graduates will know basic frameworks of leading individuals in organizations.

- Objective A: Demonstrate awareness of conventional and innovative applications to leadership and motivation.
- Objective B: Identify effective methods of teamwork and communication.

Business Minor

The Business Minor is available to provide an introduction to business for non-business students who may want to seek employment in business after graduation. It consists of six required courses and one elective selected from several advanced business courses. For additional information, please see Laura McEwen, assistant dean of business.

Code	Title	Credits
ACC 201	Financial Accounting	3
ECO 101	Principles of Macroeconomics	3
ECO 255	Business Statistics	3
FIN 201	Introduction to Corporate Finance	3
MGT 101	Introduction to Management	3
MKT 201	Principles of Marketing	3
Select one of the following business electives:		3
ECO 102	Principles of Microeconomics	
ECO 256	Business Analytics	
FIN 311	Intermediate Corporate Finance	
MGT 325	Operations Analysis for Business	
MGT 360	Organizational Behavior	
MGT 364	Human Resources Management	
MGT 370	Managerial Environment	
MKT 320	Consumer Behavior	
MKT 375	International Marketing	
MKT 350	Digital Marketing	
Total Credits		21

Accounting Programs

120 Hour and 150 Hour Accounting Programs &
Accounting Information Systems Program

Chair: Ian J. Redpath, JD, LLM

Introduction

The Department of Accounting seeks to prepare graduates with the skills that are necessary for success in the profession of accounting. Accounting professionals are expected to be competent in accounting skills, well rounded in the various disciplines of business and possess excellent communication and interpersonal skills. Students with degrees in accounting find positions in public accounting, the financial sector, government and nonprofit entities, and other areas of business.

The accounting curriculum is registered with the New York State Education Department and the 150 hour accounting programs meet the education requirements of the state of New York for CPA licensure. To become a licensed CPA, an accounting graduate should also meet the experience requirement of the state of New York. Students desiring to sit for the exam and obtain their CPA license in other states should check with those states for their specific requirements. Academic options for CPA licensure specific to each variation in the Accounting degree program can be found in the pages that can be accessed by clicking the Majors tab at the top of this page.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to Accounting Programs webpage (https://www.canisius.edu/academics/programs/accounting/).

Requirements for Graduation

To qualify for graduation with any of the undergraduate Accounting degrees, a candidate must complete all the graduation requirements outlined in this catalog and must have a cumulative grade average of 2.0 in all Accounting courses taken at Canisius College as well as an overall GPA of at least 2.0. Students pursuing an MBA in Accounting as part of a combined undergraduate/graduate (150 Hr.) degree program must also achieve a cumulative GPA of 3.0 (scale of 4.0) in their graduate studies.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Retaking Courses

Students who are dissatisfied with their grade in a course, did not meet the minimum grade requirement for upper level accounting courses, or withdrew may repeat the course once (exceptions may be approved by the assistant dean of business in consultation with the department chair). In such cases both grades will be entered in the student's record, but, for the purpose of computing grade point average, only the second grade will be used for the calculation. Because retaking courses that have already been passed (any grade of D or above) affects a student's financial aid, students should consult with the financial aid office before retaking any courses.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the

student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Note: Many accounting majors choose to dual major by combining an Accounting degree with a degree in Accounting Information Systems. Please consult your advisor for more detailed information.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Note: While students are encouraged to begin meeting with an academic advisor early in their college career to consider various degree options, they generally do not have to make a decision about which accounting program to pursue until their junior year. For additional information regarding the MBA in Accounting (http://catalog.canisius.edu/graduate/wehle-school-business/mba-professional-accounting/) refer to the Graduate Catalog or meet with an advisor. Programs are subject to change to meet State standards.

Accounting Majors/Programs

- Accounting (p. 256) - A 120 credit hour degree that provides options for students that want to earn a Certified Public Accountant (CPA) license as well as for those students who do not intend to pursue CPA licensure.
- Professional Accounting (p. 257) - A 150 credit hour degree that prepares students to sit for the Certified Public Accountant (CPA) license exam.
- Accounting and MBA in Accounting (MBAA) (p. 259) - A 150 credit hour degree that prepares students to sit for the Certified Public Accountant (CPA) license exam as well as earn both undergraduate (B.S.) and graduate (M.B.A.) degrees in Accounting.
- Accounting Information Systems (p. 265) - A 120 credit hour degree program for students interested in careers that require accounting skills and advanced technology skills. Many accounting majors elect to add this degree as a dual major option to enhance their career options following graduation.

Accounting (ACC), (p. 254) Business Law (LAW) (p. 255)

Accounting Courses

ACC 201 Financial Accounting **3 Credits**
For Non-Accounting Majors. Introduction to accounting concepts for external financial reporting. Accounting theories and principles relative to asset and liability valuations, and income determination.
Offered: fall & spring.

ACC 202 Managerial Accounting **3 Credits**
For Non-Accounting Majors. Introduction to accounting concepts for internal reporting and control. Cash budgeting, decision making, breakeven analysis, and performance evaluation.
Prerequisite: ACC 201.
Offered: fall & spring.

ACC 211 Principles of Accounting I **3 Credits**
For Accounting Majors. Fundamental concepts and procedures of financial accounting with emphasis on asset and liability valuations and income determination.
Offered: fall & spring.

ACC 212 Principles of Accounting II **3 Credits**
For Accounting Majors. Fundamental concepts and procedures of financial and managerial accounting with emphasis on asset funding, including debt and equity and cash flows. Accounting applications of present value concepts, introduction to budgeting and product costing. During the Spring semester the course has a mandatory 1 hour non-credit recitation section for preparation for the intermediate accounting series.
Prerequisite: minimum grade of C- in ACC 201.
Offered: spring & summer

ACC 301 Intermediate Accounting I **3 Credits**
First of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.
Prerequisite: minimum grade of C- in both ACC 201 & ACC 212, junior standing, & overall GPA of 2.0.
Offered: fall & spring.

ACC 302 Intermediate Accounting II **3 Credits**
Second of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.
Prerequisite: minimum grade of C- in ACC 301, junior standing, an overall GPA of 2.0.
Offered: spring & summer

ACC 303 Cost Accounting **3 Credits**
Preparation and analysis of data utilized by management in planning and control decisions. Inventory valuation and reporting methods. Establishment and use of standards and budgets. The department offers ACC 303PD sections. These sections have a mandatory professional development lab attached to them. Their objective is to guide students as they develop the communication and leadership skills valued by the accounting profession. The course has a mandatory 3 hour non-credit recitation section.
Prerequisite: ACC 212, junior standing, & an overall GPA of 2.0.
Offered: fall & spring.

ACC 307 Accounting Information Systems **3 Credits**
Development, organization, and implementation of accounting and management information systems. Emphasis on enterprise risk management, systems controls, processing cycles, and systems development life cycle.
Prerequisite: ACC 201 & ISB 101.
Offered: fall & spring.

ACC 331 Data Analytics in Accounting **3 Credits**
Overview of electronic business transactions emphasizing concepts and foundations underlying data analytics for accounting. Course provides theoretical foundations of business intelligence, descriptive analytics, data visualization, and predictive analytics. Students apply data analytic concepts through the use of analytics software.
Prerequisite: ACC 307 (may register concurrently).
Offered: every spring.

ACC 415 Basic Taxation **3 Credits**
Provisions of Internal revenue Code relating to the determination of income, exclusions, deductions and credits. Emphasis is on the individual and sole proprietors. The course includes learning basic tax reseach and communication skills.
Prerequisite: minimum grade of C- in both ACC 201 & ACC 212.
Offered: fall.

ACC 416 Advanced Taxation **3 Credits**
Internal Revenue Code provisions relating to taxation of corporations, shareholders; partnerships, partners, estates, trusts and multistate taxation.
Prerequisite: minimum grade of C- in ACC 415.
Offered: spring.

ACC 421 Advanced Accounting Problems **3 Credits**
Accounting for corporate mergers and acquisitions, state and local government, non-profit institutions and foreign exchange transactions.
Prerequisite: minimum grade of C- in ACC 302.
Offered: fall.

ACC 425 Auditing Theory and Practice **3 Credits**
Generally accepted auditing standards and practice relevant to verification of historical financial statements; responsibilities and ethics pertinent to the public accounting profession; internal control evaluation; applying auditing programs; development of working paper documentation; the application of statistical sampling to gather audit evidence; the determination of the appropriate audit report for a given audit situation.
Prerequisite: minimum grade of C- in ACC 302.
Offered: every fall.

ACC 426 Information Systems Auditing **3 Credits**
Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.
Prerequisite: minimum grade of C- in each of ACC 307 & one of the following: ACC 331, ACC 452, or ACC 425.
Offered: fall.

ACC 427 Advanced Auditing **3 Credits**
This course embeds the advanced study of auditing in an experiential professional context through case analysis, simulations, and professional standards. Emphasis is placed on the development of competencies such as critical thinking, professional judgment, professional skepticism, oral and written communication, ethical reasoning, and leadership and team building. Broad exposure to the professional accounting/auditing literature assists students in reflecting on course technical content.
Prerequisite: ACC 425.
Offered: every spring.

ACC 429 Governmental and Not for Profit Accounting **3 Credits**
Accounting and reporting issues that apply to governmental units, hospitals, schools, religious institutions and other non-profit organizations; budgetary procedures including appropriations and encumbrances.
Prerequisites: ACC 302
Offered: spring.

ACC 441 Fraud Examination: Detection and Deterrence **3 Credits**
The course will concentrate on financial fraud, white-collar crime, how financial fraud is perpetrated, approaches to fraud investigations and documentation, and fraud detection and prevention. Ethical issues in fraud examination and investigation will be covered as well as strategies and tools for fraud deterrence in organizations.
Prerequisite: minimum grade of C- in each of ACC 301, ACC 302, & either ACC 425 or ACC 426.
Offered: fall.

ACC 451 Accounting Theory and Research **3 Credits**
Standard setting procedures at the U.S. and international levels, accounting concepts and principles, contemporary accounting issues, concepts of income determination, database/library research to support or oppose accounting positions.
Prerequisite: minimum grade of C- in ACC 302.
Offered: fall.

ACC 452 Enterprise Systems **3 Credits**
Evaluating enterprise information, enterprise resource planning (ERP) system design and functionality, data integrity, use of financial and non-financial information for organizational decision-making, business process improvement and risk management.
Prerequisite: minimum grade of C- in ACC 307.
Offered: spring.

ACC 496 Internship **1-3 Credits**
Internships require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

ACC 499 Independent Research in Accounting **1-3 Credits**
Undertaking of a significant piece of independent research. By appointment with chairperson. Independent studies require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.
Offered: fall & spring.

Business Law Courses

LAW 371 Business and Commercial Law **3 Credits**
American legal system and substantive law relating to business. This course focuses on the Constitution, Torts, Criminal, Cyber, Interllectual Property,Contracts, UCC Sales, International law and ehthics and accountants professional responsiblilty.
Offered: fall.

LAW 372 Business Organizations and Commercial Paper **3 Credits**
The American Legal System and substantive law relating to business focusing on the law relating to: negotiable instruments, banking, debtor creditor relationships, bankruptcy, secured transactions, agency, partnerships and LLCs, securities regulation, employment, environmental, anti-trust, property and wills and trusts.
Prerequisite: minimum grade of C in LAW 371.
Offered: spring.

LAW 509 Legal Environment and Ethics **3 Credits**
Threshold knowledge for managers of the law in areas of contract, product liability, corporations, partnerships, employment and environment.
Offered: every fall, spring, & summer.

LAW 671 Business Law and Legal Environment **4 Credits**
Legal aspects of partnerships and corporations; substantive law of contracts, agency, bailments, accountants' liability; Uniform Commercial Code, commercial paper and secured transactions; bankruptcy, SEC, antitrust law.
Offered: every fall.

LAW 809 Legal Environment and Ethics **3 Credits**
Threshold knowledge for managers of the law in areas of contract, product liability, corporations, partnerships, employment and environment.
Offered: every summer.

Accounting (BS) - 120 Hr.

Chair: Ian J. Redpath, JD, LLM

Introduction

The Department of Accounting seeks to prepare graduates with the skills that are necessary for success in the profession of accounting. Accounting professionals are expected to be competent in accounting skills, well rounded in the various disciplines of business and possess excellent communication and interpersonal skills. Students completing the accounting program find positions in public accounting, industry, the financial sector, government and nonprofit entities.
The accounting curriculum is registered with the New York State Education Department. To become a licensed CPA, an accounting graduate should also meet the experience requirement of the state of New York. Students desiring to sit for the exam and obtain their CPA license in other states should check with those states for their specific requirements. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to Accounting Program webpage (https://www.canisius.edu/academics/programs/accounting/).

Note: Please see the Accounting Programs Overview (p. 253) **page in this catalog for important information about degree policies and courses.**

Becoming a Licensed Certified Public Accountant (C.P.A.)

There are two basic tracks for completing the 120 Hr. Accounting Program: 1) The C.P.A. track and, 2) The Non-C.P.A. track. Students who wish to qualify to take the C.P.A. exam must use their accounting elective courses and a free elective course to take a set of classes that cover important topics related to public accounting (see courses listed on the Curriculum tab for this program). Students who do not wish to take the C.P.A. exam can select other classes when choosing how they will satisfy their accounting and free electives course requirements. In addition to passing the C.P.A. exam, 120 Hr. accounting majors must also meet additional New York State requirements to become licensed. Accounting students in the 120 Hr. Program are strongly encouraged to discuss these two options (CPA Track & Non-CPA Track) and New York State CPA licensing requirements with their adviser.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Course Requirements: In addition to the common liberal arts and business courses, students in this program will take:

Code	Title	Credits
Business Core		
Required courses for all business majors (p. 251)		49-51
Additional Major Requirements		
ACC 301 & ACC 302	Intermediate Accounting I and Intermediate Accounting II	6
ACC 303	Cost Accounting	3
ACC 307	Accounting Information Systems	3
ACC 415	Basic Taxation	3
LAW 371	Business and Commercial Law	3
LAW 372	Business Organizations and Commercial Paper	3
ENG 389	Business Communication	3
Accounting Electives		6
Total Credits		79-81

Recommended Courses to Take the CPA Exam

Students in the 120 credit hour Accounting program who wish to be qualified to take the CPA exam must use their Accounting and Free Elective courses to take the following:

Code	Title	Credits
ACC 416	Advanced Taxation	3
ACC 425	Auditing Theory and Practice	3
ACC 427	Advanced Auditing	3

Roadmap

Typical Schedule

120 Hours — BS in Business Administration (Major: Accounting)

Freshman	
Fall	**Spring**
ENG 111	ENG 112
RST 101	MAT 106
MAT 105	ECO 102
ECO 101	PHI 101
BUS 101	BUS 102
Sophomore	
Fall	**Spring**
MGT 101	MKT 201
ACC 211	ACC 212
ECO 255	ECO 256
ISB 101	ACC 307

Field of Knowledge 4 (History)	BUS 201
	Field of Knowledge 3 (Arts)
Junior	
Fall	**Spring**
ACC 301	ACC 302
ACC 303	ENG 389
FIN 201	Arts & Science Elective
Field of Knowledge 6 (Natural Science)	Field of Knowledge 2 (Philosophy)
Field of Knowledge 1 (Religious Studies)	College Core Capstone
Senior	
Fall	**Spring**
ACC 415	Accounting Elective (400 Level)[1]
Accounting Elective (400 Level)[1]	MGT 325
LAW 371	LAW 372
Arts & Science Elective	MGT 446
Arts & Science Elective	Free Elective[1]

[1] Students who wish to be qualified to take the CPA exam must use their ACC Electives and Free Electives to take the following 3 courses:

- ACC 416 Advanced Tax
- ACC 425 Auditing
- ACC 427 Advanced Auditing

Learning Goals & Objectives

Learning Goal 1

Students will apply current principles of accounting to the measurement and reporting of accounting information.

Students will:

Objective A: Construct the financial statements in accordance with generally accepted accounting principles and analyze the strengths and weaknesses of each statement;
Objective B: Evaluate the reporting and valuation of assets and liabilities in accordance with generally accepted accounting principles;
Objective C: Evaluate the various alternatives to the measurement of income and the determination of financial position.

Learning Goal 2

Graduates will know how to compare/contrast alternative business decisions, and evaluate the potential impact of these decisions on future financial performance.

Students will:
Objective A: Demonstrate a sound understanding of cost behavior and analyze the differences resulting from fixed and variable costs in financial performance;
Objective B: Analyze the differences that result in financial reporting from the company's choice of inventory costing techniques;
Objective C: Apply budgeting techniques in the preparation of static and flexible budgets.

Learning Goal 3

Graduates will know the characteristics of internal control procedures needed in the aggregation of accounting information.

Students will:

Objective A: Demonstrate an understanding of the purpose of internal controls;
Objective B: Demonstrate an understanding of the principles of controls;
Objective C: Analyze the relationship of technology and controls.

Learning Goal 4

Graduates will know how the external regulatory, legal, and ethical environments impact business decisions and financial reporting requirements.

Students will:

Objective A: Apply different ethical frameworks in making business decisions;
Objective B: Apply both societal and governmental laws/regulations in making business decisions;
Objective C: Apply Federal Tax Law and regulation in the determination of taxable liability.

Professional Accounting (BS)

Chair: Ian J. Redpath, JD, LLM

Introduction

To become a licensed Certified Public Accountant (C.P.A.), all states require students to complete 150 credit hours of instruction at an accredited college or university. In the state of New York, students can take the C.P.A. exam after only completing 120 credit hours of instruction, but before receiving a C.P.A. license, individuals must complete an additional 30 credit hours of instruction as well as complete one year of full-time work experience in the accounting field. Because a traditional Bachelor's degree program in New York usually requires 120 credit hours of course work, colleges and universities have developed alternative ways for accounting students to meet the 150 credit hour standard required for professionals who wish to become licensed Certified Public Accountants.
One option available at Canisius College is for students to complete an undergraduate program consisting of 150 credit hours of instruction leading to a Bachelor of Science Degree in Professional Accounting. This degree can be combined with a second major or taken as a stand-alone degree. This program usually takes 5 years to complete, but with proper planning can be completed in 4 1/2 years. AP credits may also reduce completion time. This program is registered with the State of New York and qualifies a graduate to take the C.P.A. examination and become fully licensed once all other New York State requirements have been met. In addition to the BS in Professional Accounting, 150 Hr. Program, Canisius offers other 150 Hr. programs that might provide additional benefits to qualified students. Students are strongly encouraged to discuss their career goals and learn about C.P.A. licensing early in their college career by meeting with their academic adviser.

Note: Please see the Accounting Programs Overview **(p. 253) page in this catalog for important information about degree policies and courses.**

Admission to the Professional Accounting (150 Hr.) Program

Students do not need to seek special admission to the Professional Accounting Program, but they must declare their intent to pursue the major by completing a major declaration form with the Student Records Office,

and by emailing their department Program Adviser and the assistant dean of the Richard J. Wehle School of Business.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Business Core		
Required courses for all business majors (p. 251)		49-51
Additional Major Requirements		
ACC 301 & ACC 302	Intermediate Accounting I and Intermediate Accounting II	6
ACC 303	Cost Accounting	3
ACC 307	Accounting Information Systems	3
ACC 415	Basic Taxation	3
ACC 416	Advanced Taxation	3
ACC 421	Advanced Accounting Problems	3
ACC 425	Auditing Theory and Practice	3
ACC 426	Information Systems Auditing	3
ACC 427	Advanced Auditing	3
ACC 451	Accounting Theory and Research	3
LAW 371	Business and Commercial Law	3
LAW 372	Business Organizations and Commercial Paper	3
ENG 389	Business Communication	3
Accounting Elective		3
Business Elective		3
Total Credits		97-99

Roadmap

Typical Schedule

Professional Accounting (150 Hr.)

Freshman	
Fall	**Spring**
ENG 111	ENG 112
Select one of the following:	PHI 101
MAT 105	MAT 106 (or an A&S elective if MAT 109, MAT 111 or MAT 115 was taken in the fall)
MAT 109	ECO 102
MAT 111	Business International Requirement
MAT 115	MGT 325
ECO 101	BUS 102
RST 101	
BUS 101	
Business International Requirement	
Sophomore	
Fall	**Spring**
MGT 101	MKT 201
ACC 211	ACC 212
ECO 255	ACC 307
ISB 101	ECO 256
Field of Knowledge 4 - History	BUS 201
	Field of Knowledge 3 - Arts
Junior	
Fall	**Spring**
ACC 301	ACC 302
ACC 303	ENG 389
FIN 201	Field of Knowledge 2 - Philosophy[1]
LAW 371	LAW 372
Field of Knowledge 1 - Religion	Field of Knowledge 6 - Natural Science
Senior	
Fall	**Spring**
ACC 415	ACC 416
ACC 421	MGT 325
ACC 425	MGT 446
Business Elective	ACC 427
Core Capstone	A & S Elective
Fifth Year	
Fall	**Spring**
ACC 426	Accounting Elective
ACC 451	A&S Elective
A&S Elective	Free Elective
Free Elective	Free Elective
Free Elective	Free Elective

[1] Ethics Course

Learning Goals & Objectives

Learning Goal 1

Students will apply current principles of accounting to the measurement and reporting of accounting information.

Students will:

Objective A: Construct the financial statements in accordance with generally accepted accounting principles and analyze the strengths and weaknesses of each statement;

Objective B: Evaluate the reporting and valuation of assets and liabilities in accordance with generally accepted accounting principles;

Objective C: Evaluate the various alternatives to the measurement of income and the determination of financial position;

Objective D: Apply aspects of FASB's conceptual framework to transactions and compare/contrast the reporting impact of the concepts applied.

Learning Goal 2

Graduates will know how to compare/contrast alternative business decisions, and evaluate the potential impact of these decisions on future financial performance.

Students will:

Objective A: Demonstrate a sound understanding of cost behavior and analyze the differences resulting from fixed and variable costs in financial performance;

Objective B: Analyze the differences that result in financial reporting from the company's choice of inventory costing techniques;

Objective C: Apply budgeting techniques in the preparation of static and flexibile budgets;

Objective D: Evaluate effectiveness of controls and the methods used to test controls.

Learning Goal 3

Graduates will know the characteristics of internal control procedures needed in the aggregation of accounting information.

Students will:

Objective A: Demonstrate understanding of the purpose of internal controls;

Objective B: Demonstrate understanding of principles of controls;

Objective C: Analyze the relationship of technology and controls;

Learning Goal 4

Graduates will know how the external regulatory, legal, and ethical environments impact business decisions and financial reporting requirements.

Students will:

Objective A: Apply different ethical frameworks in making business decisions;

Objective B: Apply both societal and governmental laws/regulations in making business decisions;

Objective C: Apply Federal Tax Law and regulation in the determination of taxable liability.

Accounting (BS) and MBA in Accounting (MBAA)

Candidates must be pursing a Canisius BS in Accounting to be eligible for this program.

The Master Business Administration in Accounting (150 hour program) meets the NYS educational requirement for 150 hours for certification as a NYS CPA. Under present education requirements of the State of New York, students are eligible to sit for the NYS CPA examination upon completing their 120 hour program (BS in Accounting) with the completion of Auditing. Students must have 150 hours to secure the educational requirements for NYS CPA Licensure with the completion of Auditing.

Students will apply for the MBAA 150 hour program in the fall semester of their junior year. In their senior year, students will start taking classes at the MBA level. After graduating with a BS in Accounting, with a minimum QPA of 2.0 in all courses and the required 2.0 in accounting/business law courses, students will start the graduate portion of their program (MBAA). Students will be graduate students and pay student graduate tuition rates. Graduate tuition is charged per credit hour.

Admission Requirements

Students entering this program must have a bachelor's degree in accounting from Canisius College to start the graduate portion of their program (MBAA). This program meets the NYS educational requirement for 150 hours for certification as a NYS CPA.

Students should apply in the fall semester of their junior year. Applications can be secured in the Graduate Business Office and informational sessions will be held in the fall semester.

The MBAA Admissions Committee takes a holistic approach in evaluating an application for admission. The committee takes into consideration the undergraduate QPA and the scores on the Graduate Management Admission Test (GMAT). The Graduate Record Exam (GRE) will not be accepted. Following guidelines are suggested for those considering applying. The candidate should have (1) a minimum cumulative average of 2.75 in all accounting courses (2) a minimum cumulative GPA of 3.0 in all courses, (3) a score of at least 500 on the GMAT. With the completion of the GMAT, a decision will be made before the completion of the spring semester of a student's junior year for provisional admission. Upon completion of the spring semester of the junior year, students will be re-evaluated for regular admission based on the above criteria.

GMAT Waiver - Students are eligible for a GMAT waiver based on the following criteria:

1. GPA of 3.2 in all courses

2. GPA of 3.0 in all accounting courses including business law

3. A minimum grade of C in ACC 301 and ACC 302

Students who do not meet the criteria for acceptance into the MBAA 150 hour program are eligible for the 150 hour undergraduate program in Professional Accounting by completing all undergraduate courses.

Registration for Courses in the MBAA

Upon acceptance, students will be contacted by the Graduate Business Office for registration for their first fall semester in the MBAA Program. Students will still secure advising for registration for the spring semester of their senior year. Interested candidates will register for their required accounting courses and will be changed to the graduate sections at the time of acceptance. Graduate sections for the accounting courses meet at the same times as the undergraduate sections.

Students must take the following courses in their senior year:

Accounting requirements:

ACC 715 for ACC 415 (fall only)

ACC 716 for ACC 416 (spring only)

ACC 721 for ACC 421 (fall only)

ACC 725 for ACC 425 (fall only)

ACC 751 for ACC 451 (fall only)

Business requirements:

MGT 507 for MGT 325 (fall or spring)

MGT 690 for MGT 446 (fall or spring)

Please note, D grades are not awarded at the graduate level.

Academic Standing

For the undergraduate portion of the MBAA 150 hour program students should review the probationary and dismissal policies in the undergraduate catalog for BS/BA candidates.

For the graduation portion of the program students must have CGPA of 3.0 to graduate.

A student is placed on academic probation if:

1. After completion of six hours of course work, the student's cumulative grade point average is 2.0 or lower,

2. Any time after completion of nine or more hours of course work, the cumulative grade point average is below a 3.0 or lower.

A student may be dismissed from the program if:

1. After completion of six hours of course work, subsequent to being placed on academic probation, the cumulative grade point average is less than 2.0,

2. After completion of at least 18 hours of course work, the cumulative grade point average is less than 3.0. A student may be dismissed without having been placed on probation first.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Core Curriculum or Honors Curriculum and Free Electives		36
(must satisfy liberal arts requirements)		
Common Body of Business Knowledge		
Required courses for all business majors (p. 251)		45-48
Accounting Courses at the Undergraduate Level		
ACC 301	Intermediate Accounting I	3
ACC 302	Intermediate Accounting II	3
ACC 303	Cost Accounting	3
ACC 307	Accounting Information Systems	3
LAW 371	Business and Commercial Law	3
LAW 372	Business Organizations and Commercial Paper	3
ENG 389	Business Communication	3
Accounting courses taken in 4th year as graduate courses		
MGT 507	Operations Planning and Control	3
MGT 690	Strategic Management and Leadership	3
ACC 715	Basic Taxation	3
ACC 716	Advanced Taxation	3
ACC 721	Advanced Financial Reporting	3
ACC 725	Auditing Theory and Practice	3
ACC 727	Advanced Audit	3
Graduate Portion- courses taken in 5th year		
MGT 502	Leadership in Organizational Behavior	3
FIN 508	Corporate Finance	3
MKT 630	Marketing Strategy	3
MBA Finance Elective		3
MGT 641	Human Resource Management	3
ACC 726	Information Systems Auditing	3
ACC 751	Seminar in Accounting Theory	3
Two MBA Electives		6
Total Credits		150-153

Please note that this curriculum involves 150-153 credits that fulfills the 120 credits required for a BS degree, 48 graduate credits required for the MBAA, and 150+ total credits for the CPA requirements.

Typical Schedule

150-Hours Program, BS in Business Administration (Major: Accounting)/ MBA in Accounting (MBAA)

Freshman	
Fall	**Spring**
ENG 111	ENG 112
MAT 105, 109, 111, or 115	MAT 106 (or Arts and Sciences Elective if MAT 109, 111, or 115 taken in fall)
ECO 101	ECO 102
RST 101	PHI 101
Business International Requirement	Business International Requirement
BUS 101	BUS 102
Sophomore	
Fall	**Spring**
MGT 101	MKT 201
ACC 211	ACC 212
ECO 255 (Statistics I)	ECO 256 (Statistics II)
ISB 101	ACC 307
Field of Knowledge 4 - History	Field of Knowledge 3 - Arts
	BUS 201
Junior	
Fall	**Spring**
ACC 301	ACC 302
ACC 303	ENG 389
FIN 201	Arts and Sciences Elective
LAW 371	Field of Knowledge 2 - Philosophy[1]
Field of Knowledge 1 - Religion	LAW 372
Field of Knowledge 6 - Science	

Senior	
Fall	**Spring**
ACC 715	ACC 716
ACC 721	ACC 727
ACC 725	MGT 507
Core Capstone	MGT 690
Arts and Sciences Elective	Arts and Sciences Elective
Fifth Year	
Fall	**Spring**
MBA Elective	Finance Elective
ACC 726	MBA Elective
MGT 502	MKT 630
FIN 508	MGT 641
ACC 751	

[1] Ethics course

Learning Goals & Objectives

Learning Goal 1

Students will apply current principles of accounting to the measurement and reporting of accounting information.

Students will:

Objective A: Construct the financial statements in accordance with generally accepted accounting principles and analyze the strengths and weaknesses of each statement;

Objective B: Evaluate the reporting and valuation of assets and liabilities in accordance with generally accepted accounting principles;

Objective C: Evaluate the various alternatives to the measurement of income and the determination of financial position;

Objective D: Apply aspects of FASB's conceptual framework to transactions and compare/contrast the reporting impact of the concepts applied.

Learning Goal 2

Graduates will know how to compare/contrast alternative business decisions, and evaluate the potential impact of these decisions on future financial performance.

Students will:

Objective A: Demonstrate a sound understanding of cost behavior and analyze the differences resulting from fixed and variable costs in financial performance;

Objective B: Analyze the differences that result in financial reporting from the company's choice of inventory costing techniques;

Objective C: Apply budgeting techniques in the preparation of static and flexibile budgets;

Objective D: Evaluate effectiveness of controls and the methods used to test controls.

Learning Goal 3

Graduates will know the characteristics of internal control procedures needed in the aggregation of accounting information.

Students will:

Objective A: Demonstrate understanding of the purpose of internal controls;

Objective B: Demonstrate understanding of principles of controls;

Objective C: Analyze the relationship of technology and controls;

Learning Goal 4

Graduates will know how the external regulatory, legal, and ethical environments impact business decisions and financial reporting requirements.

Students will:

Objective A: Apply different ethical frameworks in making business decisions;

Objective B: Apply both societal and governmental laws/regulations in making business decisions;

Objective C: Apply Federal Tax Law and regulation in the determination of taxable liability.

ACC 201 Financial Accounting **3 Credits**

For Non-Accounting Majors. Introduction to accounting concepts for external financial reporting. Accounting theories and principles relative to asset and liability valuations, and income determination.

Offered: fall & spring.

ACC 202 Managerial Accounting **3 Credits**

For Non-Accounting Majors. Introduction to accounting concepts for internal reporting and control. Cash budgeting, decision making, breakeven analysis, and performance evaluation.

Prerequisite: ACC 201.

Offered: fall & spring.

ACC 211 Principles of Accounting I **3 Credits**

For Accounting Majors. Fundamental concepts and procedures of financial accounting with emphasis on asset and liability valuations and income determination.

Offered: fall & spring.

ACC 212 Principles of Accounting II **3 Credits**

For Accounting Majors. Fundamental concepts and procedures of financial and managerial accounting with emphasis on asset funding, including debt and equity and cash flows. Accounting applications of present value concepts, introduction to budgeting and product costing. During the Spring semester the course has a mandatory 1 hour non-credit recitation section for preparation for the intermediate accounting series.

Prerequisite: minimum grade of C- in ACC 201.

Offered: spring & summer

ACC 301 Intermediate Accounting I **3 Credits**

First of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.

Prerequisite: minimum grade of C- in both ACC 201 & ACC 212, junior standing, & overall GPA of 2.0.

Offered: fall & spring.

ACC 302 Intermediate Accounting II **3 Credits**

Second of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.

Prerequisite: minimum grade of C- in ACC 301, junior standing, an overall GPA of 2.0.

Offered: spring & summer

ACC 303 Cost Accounting **3 Credits**
Preparation and analysis of data utilized by management in planning and control decisions. Inventory valuation and reporting methods. Establishment and use of standards and budgets. The department offers ACC 303PD sections. These sections have a mandatory professional development lab attached to them. Their objective is to guide students as they develop the communication and leadership skills valued by the accounting profession. The course has a mandatory 3 hour non-credit recitation section.
Prerequisite: ACC 212, junior standing, & an overall GPA of 2.0.
Offered: fall & spring.

ACC 307 Accounting Information Systems **3 Credits**
Development, organization, and implementation of accounting and management information systems. Emphasis on enterprise risk management, systems controls, processing cycles, and systems development life cycle.
Prerequisite: ACC 201 & ISB 101.
Offered: fall & spring.

ACC 331 Data Analytics in Accounting **3 Credits**
Overview of electronic business transactions emphasizing concepts and foundations underlying data analytics for accounting. Course provides theoretical foundations of business intelligence, descriptive analytics, data visualization, and predictive analytics. Students apply data analytic concepts through the use of analytics software.
Prerequisite: ACC 307 (may register concurrently).
Offered: every spring.

ACC 415 Basic Taxation **3 Credits**
Provisions of Internal revenue Code relating to the determination of income, exclusions, deductions and credits. Emphasis is on the individual and sole proprietors. The course includes learning basic tax reseach and communication skills.
Prerequisite: minimum grade of C- in both ACC 201 & ACC 212.
Offered: fall.

ACC 416 Advanced Taxation **3 Credits**
Internal Revenue Code provisions relating to taxation of corporations, shareholders; partnerships, partners, estates, trusts and multistate taxation.
Prerequisite: minimum grade of C- in ACC 415.
Offered: spring.

ACC 421 Advanced Accounting Problems **3 Credits**
Accounting for corporate mergers and acquisitions, state and local government, non-profit institutions and foreign exchange transactions.
Prerequisite: minimum grade of C- in ACC 302.
Offered: fall.

ACC 425 Auditing Theory and Practice **3 Credits**
Generally accepted auditing standards and practice relevant to verification of historical financial statements; responsibilities and ethics pertinent to the public accounting profession; internal control evaluation; applying auditing programs; development of working paper documentation; the application of statistical sampling to gather audit evidence; the determination of the appropriate audit report for a given audit situation.
Prerequisite: minimum grade of C- in ACC 302.
Offered: every fall.

ACC 426 Information Systems Auditing **3 Credits**
Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.
Prerequisite: minimum grade of C- in each of ACC 307 & one of the following: ACC 331, ACC 452, or ACC 425.
Offered: fall.

ACC 427 Advanced Auditing **3 Credits**
This course embeds the advanced study of auditing in an experiential professional context through case analysis, simulations, and professional standards. Emphasis is placed on the development of competencies such as critical thinking, professional judgment, professional skepticism, oral and written communication, ethical reasoning, and leadership and team building. Broad exposure to the professional accounting/auditing literature assists students in reflecting on course technical content.
Prerequisite: ACC 425.
Offered: every spring.

ACC 429 Governmental and Not for Profit Accounting **3 Credits**
Accounting and reporting issues that apply to governmental units, hospitals, schools, religious institutions and other non-profit organizations; budgetary procedures including appropriations and encumbrances.
Prerequisites: ACC 302
Offered: spring.

ACC 441 Fraud Examination: Detection and Deterrence **3 Credits**
The course will concentrate on financial fraud, white-collar crime, how financial fraud is perpetrated, approaches to fraud investigations and documentation, and fraud detection and prevention. Ethical issues in fraud examination and investigation will be covered as well as strategies and tools for fraud deterrence in organizations.
Prerequisite: minimum grade of C- in each of ACC 301, ACC 302, & either ACC 425 or ACC 426.
Offered: fall.

ACC 451 Accounting Theory and Research **3 Credits**
Standard setting procedures at the U.S. and international levels, accounting concepts and principles, contemporary accounting issues, concepts of income determination, database/library research to support or oppose accounting positions.
Prerequisite: minimum grade of C- in ACC 302.
Offered: fall.

ACC 452 Enterprise Systems **3 Credits**
Evaluating enterprise information, enterprise resource planning (ERP) system design and functionality, data integrity, use of financial and non-financial information for organizational decision-making, business process improvement and risk management.
Prerequisite: minimum grade of C- in ACC 307.
Offered: spring.

ACC 496 Internship **1-3 Credits**
Internships require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

ACC 499 Independent Research in Accounting **1-3 Credits**
Undertaking of a significant piece of independent research. By appointment with chairperson. Independent studies require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.
Offered: fall & spring.

ACC 505 Financial Accounting **3 Credits**
Reporting the financial results of operations and financial position to investors, creditors, and managers; examination of problems that arise in the preparation, analysis and use of accounting data, with emphasis on the use of financial reports.
Offered: every fall & spring.

ACC 509 Legal Environment and Ethics **3 Credits**
Threshold knowledge for managers of the law in areas of contract, product liability, corporations, partnerships, employment and environment.
Offered: every fall, spring, & summer.

ACC 610 Managerial Accounting **3 Credits**
Preparation and analysis of data used by management in planning, budgeting, decision making, product costing, inventory valuation and performance evaluation.
Prerequisite: MBA 505 or ACC 505.
Offered: Fall & summer.

ACC 701 Financial Accounting **3 Credits**
For MBAPA Students. Fundamental concepts and procedures of financial accounting with emphasis on asset and liability valuations and income determination.
Offered: every fall & spring.

ACC 702 Managerial and Cost Accounting **3 Credits**
Preparation and analysis of data used by management for planning, control and performance evaluations; inventory valuation and reporting methods in manufacturing enterprises; standards and budgets.
Prerequisite: MBA 505 OR ACC 505 OR ACC 701 OR MBA 701.
Offered: every spring.

ACC 707 Accounting Information Systems **3 Credits**
Development, organization, and implementation of manual and electronic accounting information systems. Emphasis on flow charts and analysis, modification, and improvement of existing systems.
Prerequisite: MBA 701 OR ACC 701.
Offered: every fall & spring.

ACC 711 Intermediate Financial Reporting I **3 Credits**
First of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows. Prerequiste: MBA 701
Prerequisite: ACC 701 OR MBA 701.
Offered: every fall & spring.

ACC 712 Intermediate Financial Reporting II **3 Credits**
Second of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.
Prerequisite: MBA 711 OR ACC 711 grade of C-.
Offered: every fall & spring.

ACC 715 Basic Taxation **3 Credits**
Provisions of Internal revenue Code relating to the determination of income, exclusions, deductions and credits. Emphasis is on the individual and sole proprietors. The course includes learning basic tax reseach and communication skills.
Prerequisite: MBA 701 OR ACC 701.
Offered: every fall.

ACC 716 Advanced Taxation **3 Credits**
Internal Revenue Code provisions relating to taxation of corporations, shareholders; partnerships, partners, estates, trusts and multistate taxation.
Prerequisite: MBA 715 OR ACC 715.
Offered: every spring.

ACC 721 Advanced Financial Reporting **3 Credits**
Accounting for corporate mergers and acquisitions, state and local government, non-profit institutions and foreign exchange transactions.
Prerequisite: MBA 712 OR ACC 712.
Offered: every fall.

ACC 725 Auditing Theory and Practice **3 Credits**
Generally accepted auditing standards and practice relevant to verification of historical financial statements; responsibilities and ethics pertinent to the public accounting profession; internal control evaluation; applying auditing programs; development of working paper documentation; the application of statistical sampling to gather audit evidence; the determination of the appropriate audit report for a given audit situation.
Prerequisite: MBA 712 OR ACC 712.
Offered: every fall.

ACC 726 Information Systems Auditing **3 Credits**
Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.
Prerequisite: C- or better in MBA 725 OR ACC 725.
Offered: every fall.

ACC 727 Advanced Audit **3 Credits**
This course embeds the advanced study of auditing in an experiential professional context through case analysis, simulations, and professional standards. Emphasis is placed on the development of competencies such as critical thinking, professional judgment, professional skepticism, oral and written communication, ethical reasoning, and leadership and team building. Broad exposure to the professional accounting/auditing literature assists students in reflecting on course technical content.
Prerequisite: MBA 725 OR ACC 725.
Offered: every spring.

ACC 751 Seminar in Accounting Theory **3 Credits**
Standard setting procedures at the U.S. and international levels, accounting concepts and principles, contemporary accounting issues, concepts of income determination, database/library research to support or oppose accounting positions.
Prerequisite: MBA 711 or ACC 711.
Offered: every fall.

ACC 752 Enterprise Systems **3 Credits**
Evaluating enterprise information, enterprise resource planning (ERP) system design and functionality, data integrity, use of financial and non-financial information for organizational decision-making, business process improvement and risk management. Prerequsite: MBA 707
Prerequisite: MBA 707 OR ACC 707.
Offered: every spring.

ACC 824 Financial Accounting **3 Credits**
Reporting the financial results of operations and financial position to investors, creditors, and managers; examination of problems that arise in the preparation, analysis and use of accounting data, with emphasis on the use of financial reports.
Offered: fall day.

ACC 840 Managerial Accounting **3 Credits**
Preparation and analysis of data used by management in planning, cash and capital budgeting, decision making, product costing and performance evaluation.
Prerequisite: MBA 505 or MBA 824, OR ACC 505 OR ACC 824.
Offered: every spring.

MBA Courses Taken in 4th Year

ECO 503 Statistics for Managers **3 Credits**
This course covers statistical concepts and techniques emphasizing problem solving and interpretation: descriptive statistics, probability distributions, estimation, hypothesis testing, contingency tables, analysis of variance and simple regression analysis.
Offered: every fall, spring, & summer.

MGT 690 Strategic Management and Leadership **3 Credits**
Developing strategies for successful business operation and hands-on business analysis focusing on problem solving; student teams work with current business problems using analytical tools and skills developed from other courses. Pre-requsites: All foundation last or second last semester in program
Prerequisite: MBA 504, MBA 506, MBA 507, MBA 508, OR ECO 504, MKT 506, MGT 507, FIN 508.
Offered: every fall, spring, & summer.

ACC 715 Basic Taxation **3 Credits**
Provisions of Internal revenue Code relating to the determination of income, exclusions, deductions and credits. Emphasis is on the individual and sole proprietors. The course includes learning basic tax reseach and communication skills.
Prerequisite: MBA 701 OR ACC 701.
Offered: every fall.

ACC 716 Advanced Taxation **3 Credits**
Internal Revenue Code provisions relating to taxation of corporations, shareholders; partnerships, partners, estates, trusts and multistate taxation.
Prerequisite: MBA 715 OR ACC 715.
Offered: every spring.

ACC 721 Advanced Financial Reporting **3 Credits**
Accounting for corporate mergers and acquisitions, state and local government, non-profit institutions and foreign exchange transactions.
Prerequisite: MBA 712 OR ACC 712.
Offered: every fall.

ACC 726 Information Systems Auditing **3 Credits**
Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.
Prerequisite: C- or better in MBA 725 OR ACC 725.
Offered: every fall.

ACC 751 Seminar in Accounting Theory **3 Credits**
Standard setting procedures at the U.S. and international levels, accounting concepts and principles, contemporary accounting issues, concepts of income determination, database/library research to support or oppose accounting positions.
Prerequisite: MBA 711 or ACC 711.
Offered: every fall.

MBA Courses Taken in 5th Year

MGT 502 Leadership in Organizational Behavior **3 Credits**
This course is designed to enrich students' understanding of behavior in organizations. Course study draws on the behavioral and social sciences to explore organizational phenomena in terms of individuals, groups and total organizational systems. The course stresses the role leadership plays in creating effective organizations, meeting employee needs, managing power relationships and revealing meaning in contemporary organizations.
Offered: every fall, spring, & summer.

FIN 508 Corporate Finance **3 Credits**
This course provides an introduction to the basic tools of financial management. Topics covered include the goal of financial management, analysis of financial statements, the concept of cash flow, financial planning, time value of money, capital budgeting, the principles of stock and bond valuation, the risk/return tradeoff and capital markets theory, capital structure, cost of capital, dividend policy, working capital management and international aspects of finance.
Prerequisite: ECO 503 & ACC 505.
Offered: every fall, spring, & summer.

MKT 630 Marketing Strategy **3 Credits**
Through the use of case analysis and computer simulation games, students will develop skills in applying and evaluating strategic marketing decisions. This course builds on the MBA 506 Foundation of Marketing Strategy course in that students will be expected to have mastered material in that course and be able to apply it to a series of cases or simulations of a competitive market environment. Application of statistical and other computer-based analytical techniques also go beyond what is covered in the foundation course. Strategic decisions in the cases used will be taken from a combination of the following strategic decision areas of marketing, the choice of which areas depending on the expertise of the instructor delivering the course and the nature of the cases available: 1) Product and Service Decisions, 2) Pricing and Related Decisions, 3) Integrated Marketing Communications Decisions, and 4) Supply Chain Marketing Decisions. Organization and control factors essential to implementation of effective marketing strategy that would be used in this course include 1) Developing and implementing a marketing budget, 2) Sales forecasting approaches and techniques, 3) Financial Statement Analysis, 4) Compensation planning for sales and marketing personnel, and 5) Marketing controls and Marketing Information Systems.
Prerequisite: MBA 506 and MBA 508 or MKT 506 and FIN 508.
Offered: every fall, spring, & summer.

MGT 641 Human Resource Management **3 Credits**
This course examines the critical functions and roles of human resource management (HRM) in complex organizations. Topics include the legal implications of HRM, job analysis and design, HR planning, recruitment and selection, training and development, performance management, compensation and benefits, and employee and labor relations. Most significantly, the course looks at managing people and the employment relationship from a strategic perspective.
Prerequisite: MBA 502 or MGT 502 or MBA 825.
Offered: every fall & spring.

ACC 727 Advanced Audit **3 Credits**
This course embeds the advanced study of auditing in an experiential professional context through case analysis, simulations, and professional standards. Emphasis is placed on the development of competencies such as critical thinking, professional judgment, professional skepticism, oral and written communication, ethical reasoning, and leadership and team building. Broad exposure to the professional accounting/auditing literature assists students in reflecting on course technical content.
Prerequisite: MBA 725 OR ACC 725.
Offered: every spring.

***Students are required to complete one MBA Finance Elective and two MBA electives. MBA electives should be 600 level courses for a list of MBA elective available course descriptions please visit courses page in the MBA program.**

Accounting Information Systems (BS)

Introduction

Accounting Information Systems (BS)
Chair: Ian J. Redpath, JD, LLM

The Accounting Information Systems program is part of the Richard J. Wehle School of Business (https://www.canisius.edu/academics/our-schools/richard-j-wehle-school-business/) and is accredited by the prestigious Association to Advance Collegiate Schools of Business (AACSB). As a Jesuit institution, you will also take a strong core of courses that emphasizes writing skills, logic and breadth of knowledge about the human experience. The Jesuit tradition of developing both intellect and character translates into accounting professionals who concern themselves with not only the financial health of an organization but also its professional integrity and its contribution to society as a whole.

The Accounting Information Systems (AIS) Program is designed for students to gain the knowledge and skills required to bridge the gap between accounting and technology. The AIS program emphasizes student's developing in demand skills in the areas of data analytics, business process knowledge and information technology risk assessment. AIS is a unique program, started in 2002, as one of only 30 schools offering similar programs in the U.S. AIS majors are often dual majors with accounting who join the AIS program after starting at Canisius while some students major only in AIS. The AIS major skills are in demand in themarket place. Some AIS graduates choose careers in technical positions such as an Information Systems Auditor for high paying jobs with public accounting firms and financial institutions. These positions typically pay higher starting salaries than the entry level accounting positions. Other graduates use their AIS knowledge to supplement their accounting skills to enhance their performance in their professional careers and improve the chances of landing their first professional position.

From its inception, the AIS program has strived to reinforce concepts with state of the art technology that expands the career opportunities of our graduates. More recently, in 2013, Canisius College joined the SAP University Alliance (http://scn.sap.com/community/uac/) which enables the college to use SAP software for instructional purposes. SAP is the worldwide leader in enterprise resource planning (ERP) software solutions. Students benefit from hands on use of SAP software throughout the AIS program. The SAP initiative was made possible through partnerships with local businesses.

Courses are taught by full-time faculty members who bring real-world knowledge to the classroom through their experiences as accounting and systems professionals. You will benefit from the department's close ties with business leaders who often provide internship opportunities, permanent jobs, and valuable advice. Additional information is available at the Accounting Information Systems website (https://www.canisius.edu/academics/programs/accounting-information-systems/).

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Business Core		
Required courses for all business majors (p. 251)		49-51
Additional Major Requirements		
ACC 301	Intermediate Accounting I	3
ACC 303	Cost Accounting	3
ACC 307	Accounting Information Systems	3
ACC 331	E-Business	3
ISB 340	Database Management Systems	3
MGT 370	Managerial Environment [1]	3
ACC 426	Information Systems Auditing	3
ACC 452	Enterprise Systems	3
ENG 389	Business Communication	3
Total Credits		76-78

[1] Students may substitute LAW 371 or LAW 372 for MGT 370.

Typical Schedule

120 hours - BS in Business Administration (Major: Accounting Information Systems)

Freshman	
Fall	**Spring**
ENG 111	ENG 112
Select one of the following:	PHI 101
MAT 105, MAT 109, MAT 111 or MAT 115	MAT 106 (A&S Elective if MAT 109, MAT 111 or MAT 115 was taken in fall.)
ECO 101	ECO 102
RST 101	Business International Requirement
Business International Requirement	BUS 102
BUS 101	
Sophomore	
Fall	**Spring**
MGT 101	MKT 201
ACC 211	ACC 212
ECO 255	ECO 256
ISB 101	ACC 307
Field of Knowledge 4 - History	Field of Knowledge 3 - Arts
	BUS 201
Junior	
Fall	**Spring**
ACC 301	ACC 331
ACC 303	ENG 389

FIN 201	A&S Elective
Field of Knowledge 1 - Religion	Field of Knowledge 2 - Philosophy[1]
Field of Knowledge 6 - Science	A&S Elective
Senior	
Fall	**Spring**
ISB 340	ACC 452
ACC 426	MGT 446
MGT 325	Free Elective
MGT 370	Free Elective
Core Capstone	A&S Elective

[1] Ethics Required

ACC 211 Principles of Accounting I **3 Credits**
For Accounting Majors. Fundamental concepts and procedures of financial accounting with emphasis on asset and liability valuations and income determination.
Offered: fall & spring.

ACC 212 Principles of Accounting II **3 Credits**
For Accounting Majors. Fundamental concepts and procedures of financial and managerial accounting with emphasis on asset funding, including debt and equity and cash flows. Accounting applications of present value concepts, introduction to budgeting and product costing. During the Spring semester the course has a mandatory 1 hour non-credit recitation section for preparation for the intermediate accounting series.
Prerequisite: minimum grade of C- in ACC 201.
Offered: spring & summer

ACC 301 Intermediate Accounting I **3 Credits**
First of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.
Prerequisite: minimum grade of C- in both ACC 201 & ACC 212, junior standing, & overall GPA of 2.0.
Offered: fall & spring.

ACC 303 Cost Accounting **3 Credits**
Preparation and analysis of data utilized by management in planning and control decisions. Inventory valuation and reporting methods. Establishment and use of standards and budgets. The department offers ACC 303PD sections. These sections have a mandatory professional development lab attached to them. Their objective is to guide students as they develop the communication and leadership skills valued by the accounting profession. The course has a mandatory 3 hour non-credit recitation section.
Prerequisite: ACC 212, junior standing, & an overall GPA of 2.0.
Offered: fall & spring.

ACC 307 Accounting Information Systems **3 Credits**
Development, organization, and implementation of accounting and management information systems. Emphasis on enterprise risk management, systems controls, processing cycles, and systems development life cycle.
Prerequisite: ACC 201 & ISB 101.
Offered: fall & spring.

ACC 331 Data Analytics in Accounting **3 Credits**
Overview of electronic business transactions emphasizing concepts and foundations underlying data analytics for accounting. Course provides theoretical foundations of business intelligence, descriptive analytics, data visualization, and predictive analytics. Students apply data analytic concepts through the use of analytics software.
Prerequisite: ACC 307 (may register concurrently).
Offered: every spring.

ACC 426 Information Systems Auditing **3 Credits**
Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.
Prerequisite: minimum grade of C- in each of ACC 307 & one of the following: ACC 331, ACC 452, or ACC 425.
Offered: fall.

ACC 452 Enterprise Systems **3 Credits**
Evaluating enterprise information, enterprise resource planning (ERP) system design and functionality, data integrity, use of financial and non-financial information for organizational decision-making, business process improvement and risk management.
Prerequisite: minimum grade of C- in ACC 307.
Offered: spring.

ISB 340 Database Management Systems **3 Credits**
Design and application of database management systems. Topics include structured query language (SQL), data structures, querying and report writing, database design and administration, data mining and security.
Prerequisite: ISB 101 or equivalent.
Offered: every fall.

Economics Programs

There are three different ways that students can pursue degree in Economics at Canisius. Students can earn a Bachelor of Arts degree in Economics by completing a set of required Economics courses. Students who wish to pursue careers in business should consider earning a Bachelor of Science degree in Economics which combines required Economics courses with a collection of courses called The Business Core Curriculum (p. 251). The Business Core Curriculum is designed to provide students with a broad understanding of other areas of business, preparing them to take leadership roles in the organizations they work for. Finally, students earning degrees in other disciplines can get exposure to the field of Economics by earning a Minor degree. You can explore the details associated with each of these degree options by clicking the tabs at the top of this page. For additional information about the Economics program, please visit the Economics Program webpage (https://www.canisius.edu/academics/programs/economics/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a major degree in Economics. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations,

choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

A dual major in Economics and Mathematics & Statistics (p. 190) is strongly recommended for the student who is interested in graduate school in either finance or economics. Up to two mathematics courses beyond MAT 111 may be used as economics electives.

Dual majors in Economics (BS) and Finance (p. 275) are required to take six electives in total. Two must be Economics electives and four must be Finance electives.

Major Experiences

The department encourages internship experiences as part of the major and accepts one internship on a pass/fail basis as an Economics elective. Many of our majors have participated in the All-College Honors program and have written honors theses on topics in Economics and Finance.

Additional Course Considerations

ECO 455 and additional Mathematics courses are strongly recommended for students wishing to obtain graduate degrees in Economics and Finance.

Majors

The Economics and Finance Department offers two majors.

- Economics Major (BA) (p. 269)
- Business Economics Major (BS) (p. 268)

Economics Minor

This minor is only available for non-majors (student majoring in subjects other than Economics or Finance).

Code	Title	Credits
Required Courses		
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 205	Intermediate Microeconomic Analysis	3
or ECO 206	Intermediate Macroeconomic Analysis	
ECO 255	Business Statistics	3
Economics Electives		
Three courses at the 200-, 300-, or 400-level		9
Total Credits		21

ECO 101 Principles of Macroeconomics **3 Credits**
Explanation of market system through supply and demand analysis. Measurement of macroeconomic variables and development of economic models to analyze problems of unemployment, inflation and economic growth. Various fiscal and monetary policies will be discussed.
Fulfills College Core: Field 5 (Social Sciences)

ECO 102 Principles of Microeconomics **3 Credits**
Explanation of how the market system operates in the context of limited resources. Emphasis on the manner in which consumers and firms determine what to produce, how to produce and for whom to produce.
Fulfills College Core: Field 5 (Social Sciences)

ECO 205 Intermediate Microeconomic Analysis **3 Credits**
Analysis of demand and supply under various market structures. Cost and production theory, factor pricing, and welfare economics.
Prerequisite: ECO 101 & ECO 102.
Offered: fall & spring

ECO 206 Intermediate Macroeconomic Analysis **3 Credits**
The determination of national income and product in the short run and long run. Unemployment, inflation, fiscal and monetary policy will be examined in the context of static and dynamic macroeconomic models.
Prerequisite: ECO 101 & ECO 102.
Offered: fall & spring

ECO 255 Business Statistics **3 Credits**
Fundamental concepts of probability and statistics with emphasis on business and economic applications. Organizing and describing data, probability theory, sampling, estimation and hypothesis testing.

ECO 256 Business Analytics **3 Credits**
Hypothesis testing, regression analysis, goodness of fit, contingency tables, analysis of variance, time series analysis and forecasting.
Prerequisite: ECO 255.
Offered: every fall & spring.

ECO 310 Introduction to Geographic Information Systems **3 Credits**
An applied introduction to Geographic Information Systems (GIS), a mapping and spatial analysis tool that is widely used in education, government, and industry to solve spatial problems. This course combines lectures and hands-on exercises and provides students the opportunity to use ArcGIS software.
Prerequisite: ECO 101 & ECO 102, or permission of the instructor. Offered occasionally

ECO 311 Metropolitan Economic Development and GIS **3 Credits**
Economic development is an essential component of local policy and governing, and a perceived driver of success and vitality for cities, metropolitan areas and regions. This applied course will introduce students to basic economic development theory and commonly used economic performance measures within a Geographic Information Systems (GIS) environment.
Prerequisite: ECO 101 & ECO 102.
Offered: fall

ECO 320 Environmental Economics **3 Credits**
How economic analysis can be applied to promote the efficient and equitable use of natural resources, such as land, air, soil, fauna and flora. Emphasis on how the principles of economic analysis can be applied to design policies that reduce or eliminate harmful environmental impacts such as pollution and environmental degradation and improve human welfare through natural resource management. Examines how best to strike a balance between economic activity and environmental quality.
Prerequisite: ECO 101 & ECO 102. Offered occassionally

ECO 321 Economic Impact Analysis **3 Credits**
Estimation of the impact of investment, public spending, and changes in taxation or regulatory policy on a regional economy. The impact of a new project on sales, income and employment will be projected. Case studies and hands-on experience using multiple software packages will be used to conduct analysis.
Prerequisite: ECO 101, ECO 102 & ECO 255.
Offered: spring

ECO 330 Money, Banking and the Economy **3 Credits**
The connection between financial markets, the economy and the Federal Reserve. Examination of the nature of financial markets, the determination of interest rates, bank management and regulation, money and monetary policy. Emphasis on the impact of monetary policy on the macro economy. This course also serves as a Finance elective.
Prerequisite: ECO 101 & ECO 102.
Offered: fall

ECO 401 Public Economics **3 Credits**
A microeconomic analysis of the role of the public sector in resource allocation. Topics include the theory of market failures, alternative corrective measures for market failures, efficiency/equity analysis of taxes and public expenditure programs.
Prerequisite: ECO 101, ECO 102. Offered occasionally.
Fulfills College Core: Justice

ECO 411 State and Local Finance **3 Credits**
Municipal credit risk and municipal bonds analysis of revenue sources for state and local governments. Public/ private sector interaction in urban areas, city-suburban fiscal disparity and competition, state/local government structure, inter-governmental relations. This course also serves as a Finance elective.
Prerequisite: ECO 101, ECO 102, & ECO 256 (or equivalent).
Offered: spring

ECO 455 Econometrics **3 Credits**
Estimation and analysis or linear and non-linear regression models using statistical inference. Topics include: multicollinearity, heteroskedastic and serially correlated errors, forecasting, dummy variables and simultaneous equation models. Emphasis on analysis of data using EViews econometric software. A good course for those contemplating graduate school.
Prerequisite: ECO 101 & ECO 102.
Offered: every spring.

ECO 460 International Trade **3 Credits**
Theory and practice of international trade, why countries trade, what explains the patterns of trade, and what are the effects of trade on a country's welfare and income distribution. Analysis of international trade policies and their implications.
Prerequisite: ECO 101 & ECO 102.
Fulfills College Core: Global Awareness

ECO 497 Internship **3 Credits**
Student must complete a WSB Internship Application Form. May be used for Economics elective credit. Pass/Fail only.
Prerequisite: student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair, & associate dean.

ECO 499 Independent Research **1-3 Credits**
Students must work with a faculty mentor to develop their learning goals and complete a Wehle School of Business Independent Study Application Form.
Prerequisite: student must complete a WSB Independent Study Application Form and obtain the approval of a faculty supervisor, department chair, & the associate dean.

Business Economics (BS)

Chair: Mark P. Zaporowski, PhD

Introduction

Economics BS Program – Business Economics

The objective of the Economics curriculum is to provide students with an understanding of the economic environment in which they will participate as professionals. The major in Economics requires a sequence of economics courses from which the student is expected to obtain an understanding of the economic environment and the ability to develop solutions to economic problems that exist in society. In addition, Business Economics majors in the Richard J. Wehle School of Business take a set of courses called the Business Core Curriculum (p. 251). The Business Core is designed to provide students with a breadth of important business skills and knowledge that will allow them to grow and become leaders in their organizations.

Many economics graduates find rewarding and challenging employment in government and industry positions where their specialized training is put to the test and found valuable. Other students choose to deepen their knowledge of economics by attending graduate school. Still others find professional studies in business, law and health sciences more rewarding because of their economics training. For further information about this program, please consult the Economics webpage (https://www.canisius.edu/academics/programs/economics/). We also offer a BA in Economics (p. 269).

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Business Core (required courses for all business majors) (p. 251) [1]		49-51
ECO 205	Intermediate Microeconomic Analysis	3
ECO 206	Intermediate Macroeconomic Analysis	3
Economics Electives (4 courses, see text below)		12
Total Credits		67-69

[1] To satisfy the Business Core mathematics requirement, MAT 115 is recommended over options for Business Economics majors. However, students who are not well prepared in mathematics may wish to take MAT105 and MAT106 before moving on to more advanced math courses. Additional mathematics courses are recommended if the student is preparing for a graduate program in economics or finance. Students are strongly encouraged to consult with a department adviser if they have questions about the best way to satisfy the Business Core mathematics requirement.

Economics Electives

Students must take four 300- or 400-level Economics (ECO) or Finance (FIN) courses. Up to 2 of the following courses (with a minimum grade of C- in each) may be substituted for Economics elective credit:

Code	Title	Credits
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3

Accounting courses beyond ACC 202

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman

Fall	Spring
ENG 111	ENG 112
ECO 101	ECO 102
Select one of the following:	MAT 106 (or Free Elective if MAT 109, MAT 111 or MAT 115 is taken in the fall.)
MAT 105 or MAT 109, MAT 111, or MAT 115	PHI 101
RST 101	Business International Requirement II
Business International Requirement I	BUS 102
BUS 102	

Sophomore

Fall	Spring
ACC 201	ACC 202
ECO 205	ECO 206
ECO 255	ECO 256
ISB 101	FIN 201
Field of Knowledge 4	MGT 101
	BUS 201

Junior

Fall	Spring
ECO Elective	ECO Elective
MKT 201	MGT 325
Field of Knowledge 1	MGT 370
Field of Knowledge 3	Field of Knowledge 2 (Ethics)
Field of Knowledge 6	A&S Elective

Senior

Fall	Spring
ECO Elective	ECO Elective
Core Capstone	MGT 446
A&S Elective	A&S Elective
Free Elective	A&S Elective
Free Elective	Free Elective

Learning Goals & Objectives

Student Learning Goal 1

ECONOMICS MAJORS WILL be able to critically assess economic arguments.

Students will be able to:

- Objective A: Analyze economic arguments using economic models.
- Objective B: Be able to apply statistical tools in the analysis of economic arguments.

Student Learning Goal 2

STUDENTS WILL be able to apply MACROECONOMIC theory in analysis of economic growth and the problems of unemployment and inflation.

Students will be able to:

- Objective A: Display an understanding of the determinants of macroeconomic equilibrium.
- Objective B: Analyze the impact of exogenous shocks and various fiscal and monetary policies on macroeconomic equilibrium.

Student Learning Goal 3

STUDENTS WILL be able to apply MICROECONOMIC theory to explain the behavior of consumers and firms in a market economy.

Students will be able to:

- Objective A: Display an understanding of the determinants of the consumer choice given the constraints of limited household income and market prices.
- Objective B: Display an understanding of firm behavior under alternative market structures.

Economics (BA)

Chair: Mark P. Zaporowski, PhD

Introduction

Economics BA Program

The Economics Department provides courses designed to help all Canisius students understand the national and global economy. The major in the College of Arts and Sciences provides preparation for entry-level and advanced positions in a variety of career choices through its broad based study of economic activity. Potential career choices include sales, marketing, production, finance and banking, and at various levels of government such as municipalities, local development authorities, the Federal Reserve, the Department of Labor and the Department of Commerce. All of these employers value the critical thinking and analysis skills fostered in an economics curriculum.

The Economics program has also proven to be an excellent preparation for graduate schools. Some students choose to continue the study of economics in PhD and master's programs. Other students use the strong analytical foundations of their economics training to pursue advanced degrees in business, health, public administration or law. For a more detailed description of the program including policies, faculty, facilities, academic and co-curricular opportunities please view the Economics program webpage (https://www.canisius.edu/academics/programs/economics/). We also offer a BS in Business Economics (p. 268), and we encourage students to discuss these options with their advisor.

Major Experiences

The department encourages internship experiences as part of the major and accepts one internship on a pass/fail basis as an Economics elective. Many of our majors have participated in the All-College Honors program and have written honors theses on topics in Economics and Finance.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Mathematics Requirement [1]		4-6
Choose one of the following:		
MAT 105 & MAT 106	Finite Mathematics and Calculus for the Non-Sciences	
MAT 109	Calculus with Review I	
MAT 115	Calculus for Business	
MAT 111	Calculus I	
Economics Courses		
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 205	Intermediate Microeconomic Analysis	3
ECO 206	Intermediate Macroeconomic Analysis	3
ECO 255	Business Statistics	3
ECO 256	Business Analytics	3
Economics Electives		
Five courses at the 300 or 400 level		15
Total Credits		37-39

[1] MAT 115 is recommended, although students who are not well prepared in mathematics may wish to take MAT 105 and MAT 106 before moving on to more advanced math courses. Additional mathematics courses are recommended if the student is preparing for a graduate program in economics or finance. Students should consult with a departmental adviser if they have questions about the most appropriate way to satisfy the mathematics requirement.

Major Electives

Up to 2 of the following courses (with a minimum grade of C- in each) may be substituted for ECO elective credit: MAT 112, MAT 211, MAT 219, MAT 222. All Finance courses serve as Economics electives. ECO 455 and additional Mathematics and Accounting courses are strongly recommended for graduate school and the business world.

Additional Course Considerations

Economics majors may also obtain a concentration in Finance by using Economics electives to take the following courses:

Code	Title	Credits
ECO 330	Money, Banking and the Economy	3
FIN 201	Introduction to Corporate Finance	3
FIN 312	Investments	3
FIN 414	Portfolio Analysis	3
Any FIN elective at the 300 or 400 level		

This specialization is appropriate for students who wish to make a career in banking or finance.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
FYS 101	ENG 101
ECO 101	ECO 102
Select one of the following math courses:	PHI 101
MAT 105, MAT 109, MAT 111 or MAT 115	MAT 106 (or Free Elective if MAT109, MAT 111 or MAT 115 was taken in the fall.)
RST 101	Free Elective
Free Elective	BUS 102
BUS 101	

Sophomore	
Fall	**Spring**
ECO 205	ECO 206
ECO 255	ECO 256
Field of Knowledge 4	ECO Elective
Free Elective	Free Elective
Free Elective	Free Elective
	BUS 201
Junior	
Fall	**Spring**
ECO Elective	ECO Elective
Field of Knowledge 1	Field of Knowledge 2
Field of Knowledge 3	Free Elective
Field of Knowledge 6	Free Elective
Free Elective	Free Elective
Senior	
Fall	**Spring**
ECO Elective	ECO Elective
Core Capstone	Free Elective
Free Elective	Free Elective
Free Elective	Free Elective
Free Elective	Free Elective

Learning Goals & Objectives

Goal 1: Economics majors will be able to critically assess economic agruments.

Students will :

- Objective A: Be able to analyze economic arguments using economic models.
- Objective B: Be able to apply statistical tools in the analysis of economic arguments.

Goal 2: Economics majors will be able to apply macroeconomic theory in analysis of economic growth and the problems of unemployment and inflation.

Students will:

- Objective A: Display an understanding of the determinants of macroeconomic equilibrium.
- Objective B: Analyze the impact of exogenous shocks and various fiscal and monetary policies on macroeconomic equilibrium.

Goal 3: Economics majors will be able to apply microeconomic theory to explain behavior of consumers and firms in a market economy.

Students will:

- Objective A: Display an understanding of the determinants of consumer choice given the constraints of limited household income and market prices.
- Objective B: Display an understanding of firm behavior under alternative market structures.

Entrepreneurship (BS)

Director: Ji-Hee Kim, PhD

Introduction

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Entrepreneurship webpage (https://www.canisius.edu/academics/programs/entrepreneurship/).

The Entrepreneurship Major at Canisius College includes the study of subjects traditional business programs rarely cover, such as how to start new business and how to run a small growth company. The major offers an integrated curriculum which draws upon management, marketing and finance to provide students a broad background in business while developing entrepreneurial skills and insights. The entrepreneurship curriculum emphasizes creativity, innovation and interpersonal skills.

Students learn to identify and evaluate business opportunities, acquire capital and other resources, and start, develop, grow and sell a business concept. Entrepreneurship Majors are encouraged to develop a business concept and make it a reality. A key component of the curriculum is a year-long experience in which juniors and seniors develop business plans for a company, ideally one that they will eventually start and operate themselves. Real-world experience is part of the bedrock of a Canisius business education. In some courses, entrepreneurship majors act as consultants to small businesses. With faculty guidance, students work on projects for and advise practicing entrepreneurs. Students gain valuable insight by examining failure as well as success and often help their clients fix what is going wrong.

The Entrepreneurship Major is career-oriented with courses built upon a business core but tailored to the needs of entrepreneurs. Students discover their innate entrepreneurial potential and develop a set of tools and perspectives to capitalize on it.

The Canisius program prepares students to

1. acquire an existing business or franchise;
2. start up a new venture;
3. manage an existing family business for growth; and/or
4. engage in intrapreneurship — the development of new products or programs — or the evaluation and pursuit of potential mergers or acquisitions within a mature corporation.

Career Opportunities

Gaining experience on their own is natural for Entrepreneurship Majors. Some Canisius College students start and run a business while still pursuing their degrees. A car detailing firm, a landscaping service, a small business promotional agency and a retail store are current examples. Virtually all graduates of the Canisius College entrepreneurship program are involved in their own business ventures.

Internships

The Entrepreneurship Major at Canisius College strongly emphasizes hands-on experience in addition to a high-quality curriculum.

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in Entrepreneurship. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Business Core		
Required courses for all business majors (p. 251)		49-51
Additional Requirements for Entrepreneurship Major		
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
ENT 201	Entrepreneurial Mind-Set and Foundations	3
ENT 401	Small Business Management and Entrepreneurship	3
ENT 402	Building a Business: From Idea to Venture Creation	3
Major Electives		
Select three of the following electives. At least two of these electives must be offered by the Entrepreneurship program (ENT courses).		9
ENT 311	Entrepreneurship and Family Business [1]	
ENT 312	International Entrepreneurship [1]	
ENT 314	Social Entrepreneurship and Sustainability [1]	
ENT 414	Franchising and Entrepreneurship [1]	
ENT 496	Internship in Entrepreneurship	
ENT 499	Entrepreneurship Independent Study	
MGT 360	Organizational Behavior	
MGT 364	Human Resources Management	
MGT 437	Project Management	
MGT 460	Ethical Power and Influence for Leaders	
MGT 472	Comparative Management Systems (International)	
MKT 320	Consumer Behavior	
DMA 201	Introduction to Digital Media	
Total Credits		70-72

[1] The following courses are strongly recommended as Entrepreneurship electives: ENT 311, ENT 312, ENT 314, ENT 414.

Students in the Entrepreneurship major are expected to become members of the Canisius College Chapter of the Collegiate Entrepreneurs' Organization (CEO) and/or member of the Canisius Innovation Lab (CIL).

Students majoring in both Entrepreneurship and Management must complete at least five, distinct courses not counted towards the Management major, including electives for the Management minor.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman

Fall	Spring
ENG 111	ENT 110
MAT 105, 111, or 115	MGT 101
RST 101	ECO 102
ECO 101	ENG 112
ISB 101	MAT 106 (or Arts & Science Elective if MAT 109, MAT 111, or MAT 115 was taken in fall)
Business International Requirement	BUS 102
BUS 101	

Sophomore

Fall	Spring
ACC 201	ACC 202
ECO 255	FIN 201
ISB 101	PHI 101
MKT 201	ECO 256
Business International Requirement	Business International Requirement

History (Field of Knowledge 4)	
BUS 201	
Junior	
Fall	**Spring**
ENT Elective	ENT Elective
MKT 320	MGT 325
Philosophy (Field of Knowledge 2 w/ Ethics Attributes)	MGT 364
Religious Studies (Field of Knowledge 1)	Arts (Field of Knowledge 3)
Science (Field of Knowledge 6)	Arts and Sciences Elective
Senior	
Fall	**Spring**
ENT 410	MGT 446
ENT Elective	Arts and Sciences Elective
MGT 370	Free Elective
Core capstone	Free Elective
Arts and Sciences Elective	Free Elective

Learning Goals & Objectives

Student Learning Goal 1

Entrepreneurship Majors will apply a working knowledge of the principles of entrepreneurship to analysis and problem solving.

Students will:

- Objective A: Identify and apply the elements of entrepreneurship and to entrepreneurial processes;
- Objective B: Recognize the importance of entrepreneurship and identify the profile of entrepreneurs and their role in economic growth;
- Objective C: Use the entrepreneurial mind-set and behave responsibly and ethically in their roles as entrepreneurs.

Student Learning Goal 2

Entrepreneurship Majors will be able to create and start new ventures.

Students will:

- Objective A: Creatively analyze the business environment, opportunity recognition, and the business idea-generation process;
- Objective B: Know how to acquire necessary resources and organizational matters of new venture creation process;
- Objective C: Write a business plan that creates and starts a new venture.

Student Learning Goal 3

Entrepreneurship Majors will know how to manage and grow new ventures.

Students will:

- Objective A: Apply a strategy for growth and manage the implications of growth;
- Objective B: Use capital budgeting that includes cost of capital, leverage and dividend policy in a financial management context;
- Objective C: Know how to acquire resources for growth from external sources.

Minor

Interdisciplinary Entrepreneurship Minor

Beginning in fall of 2017, the Department of Management will offer an Interdisciplinary Entrepreneurship Minor. This minor is designed for students who want to expand their educational opportunities, knowledge, and experiences in entrepreneurship (either for-profit and/or not-for-profit). Students enrolled in this minor will learn to develop an entrepreneurial mindset which includes the ability to recognize creative business opportunities. Students will also learn how to develop the business plans needed to pursue these opportunities and bring business ideas to life. The Interdisciplinary Entrepreneurship Minor promotes academic excellence, innovation and student success by providing excellent, diverse, and innovative learning experiences and opportunities.

Any student from business, arts and sciences, or education and human services may enroll in the Interdisciplinary Entrepreneurship Minor regardless of their chosen major. To enroll, students must complete the appropriate minor request form. For additional information or questions, please contact Dr. Ji-Hee Kim, Director of Entrepreneurship and Associate Professor of Management by email at kim15@canisius.edu or by calling at 716-888-2606.

Students enrolled in the Interdisciplinary Entrepreneurship Minor are expected to become members of the Canisius Chapter of the Collegiate Entrepreneurs' Organization (CEO) and/or Canisius Innovation Lab (CIL).

Curriculum

Please note: we are currently revising the curriculum in this minor to provide students with more flexibility. Please contact Assistant Dean Laura McEwen for more information about the changes to the minor.

Code	Title	Credits
Required Courses		
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
ENT 201	Entrepreneurial Mind-Set and Foundations	3
ENT 401	Small Business Management and Entrepreneurship	3
Electives (3 courses)		9
Select 3 of the following electives. At least 2 of these electives must be offered by the Entrepreneurship program (ENT numbered courses). Students in any business major can not select MGT 101, MKT 201, or ACC 201 as electives for the minor.		
ENT 311	Entrepreneurship and Family Business	
ENT 314	Social Entrepreneurship and Sustainability	
ENT 402	Building a Business: From Idea to Venture Creation	
ENT 496	Internship in Entrepreneurship	
ABEC 363	Canine Evolution, Behavior and Cognition	
ANT 350	Business Anthropology	
ANT 351	Qualitative Research Methods	
DMA 201	Introduction to Digital Media	
DMA 215	Digital Media Culture	
MGT 101	Introduction to Management [1]	
MKT 201	Principles of Marketing [1]	
ACC 201	Financial Accounting [1]	
Total Credits		18

[1] Business majors may not use MGT 101, MKT 201 or ACC 201 as electives for the minor.

Courses

ENT 101 Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation **3 Credits**
Provides a broad introduction to entrepreneurship and prepares students for developing a mindset for thinking creatively, using innovation, recognizing opportunities and generating entrepreneurial ideas. Other topics include strategic and tactical planning and entrepreneurial activities of an actual business enterprise. Students will participate in the "Business Idea Elevator Pitch Competition." Open to business and non-business majors including students from the College of Arts and Sciences and the School of Education and Human Services.
Fulfills College Core: Oral Communication
Offered: every spring.

ENT 102 Student Startup Accelerator **1 Credit**
Student must already have a business idea. This course requires approval from the instructo, the program director, or department administrative associate.

ENT 201 Entrepreneurial Mind-Set and Foundations **3 Credits**
Provides an understanding of the entrepreneurial process from both conceptual and applied perspectives. Topics include creativity, innovation, the characteristics of entrepreneurs, common issues encountered by entrepreneurs, entrepreneurial marketing, entrepreneurial finance, and organizational strategies for new business enterprises. Students will engage in entrepreneurial projects. Open to business and non-business majors.
Offered: every fall.

ENT 311 Entrepreneurship and Family Business **3 Credits**
Provides students with an understanding of key concepts related to and challenges faced by family businesses. Students will learn about ways to foster healthy family businesses through the use of innovative tools and via hands-on learning. The course will explore how the dynamics of a family unit can both help and hinder the success of a business organization. Issues such as mentoring, succession planning and family creeds and councils, and the special problems of family businesses and other closely- held corporations will be explored. Attention will also be devoted to family business planning, effective governance approaches in family businesses, preparing heirs for entry into and management of family firms, and tax and compensation planning.
Prerequisite: ENT 110 or MGT 101, or by permission of the instructor.
Restriction: junior or senior standing.
Offered: every fall.

ENT 312 International Entrepreneurship **3 Credits**
Explores international entrepreneurship -- its dimensions and importance -- and how it differs from other areas of international business. Students learn to identify and analyze information available for entrepreneurs seeking to move internationally and to address the important strategic issues in international entrepreneurship. May be used as ENT and/or IBUS elective.
Prerequisite: ENT 110 or MGT 101, or by permission of the instructor.
Restriction: junior or senior standing.
Offered: occasionally.

ENT 314 Social Entrepreneurship and Sustainability **3 Credits**
This practitioner-oriented course focuses on innovative, values-driven organizations which have explicit civic missions or social purposes and which are most typically associated with the not-for-profit sector of the economy. The chief aims of the course are to help students understand and appreciate the role of the nonprofit sector in creating societal wealth in the economy, to engage participants in institutional efforts to create a good society through exposure to the work of these organization, and to have students consider a variety of forms of involvement available to aspiring entrepreneurs in preparing for leadership roles in their communities.
Prerequisite: ENT 201 or MGT 101, or by permission of the instructor.
Restriction: junior or senior standing.
Offered: every spring.

ENT 401 Small Business Management and Entrepreneurship **3 Credits**
Focuses on the most common problems encountered by owners, managers, and entrepreneurs in organizing and operating small enterprises. Topics include creativity, and innovation; entrepreneurial strategy; pursuing new venture opportunities; the new venture business plan; creative small business marketing; innovative small business management; financial management in the entrepreneurial firms; and legal requirements. Students will obtain entrepreneurial experience through working with entrepreneurs and small business enterprises.
Prerequisite: either ENT 201 or MGT 101, ACC 201, & MKT 201. Entrepreneurship majors must complete ENT 201. **Restriction:** junior standing or higher.
Offered: every spring.

ENT 402 Building a Business: From Idea to Venture Creation **3 Credits**
Capstone course required of all entrepreneurship majors at the end of the program. Students develop an original idea for a new venture and write a comprehensive business plan for that venture. An integration of the theory and practice of entrepreneurship. The course focuses on identifying opportunities for a new venture and the process of starting and growing a new business. The business plan will apply key principles and concepts to real world situations. Students must participate the New York State Business Plan Competition and other required activities to complete this course to get a final grade during the following spring semester. Please note that this class counts as an Entrepreneurship Major Capstone class, but does NOT count toward the Canisius Core Curriculum.
Prerequisite: ENT 401 or MGT 101, ACC 201 and MKT 201. **Restriction:** junior or senior standing.
Offered: every fall.

ENT 414 Franchising and Entrepreneurship **3 Credits**
Analytical approach to understanding the basic forms of franchising, legal agreements and requirements in franchising businesses. Explores how to foster a new generation of independent business owners and reasons for buying a franchise.
Prerequisite: MGT 101. **Restriction:** junior standing.
Offered: occasionally.

ENT 496 Internship in Entrepreneurship **1-3 Credits**
Non-routine job experiences that link specific entrepreneurship topics and academic concepts with practical experience. Requires supervision by faculty and student demonstration of academic value through papers and reports. Internships require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.
Offered: fall, spring, & summer.

ENT 499 Entrepreneurship Independent Study **1-4 Credits**
Limited availability and only available by application and approval by the associate dean.
Prerequisite: student must complete a WSB Independent Study Application and obtain permission of a faculty supervisor, department chair, & the associate dean.
Offered: occasionally.

Finance (BS)

Chair: Mark P. Zaporowski, PhD

Introduction

Finance BS Program

The analytical tools and problem-solving skills fostered in the Finance major will prove useful to any student who wishes to pursue a career in security analysis, business valuation, corporate management, investments, banking, real estate, insurance or small business. The program provides a concentration designed to help the student prepare for exams for licenses as Chartered Financial Analysts (CFA), and Certified Financial Planners (CFP) . A Finance concentration is also available through the Economics major. Interested students should contact the department chair. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to Finance webpage (https://www.canisius.edu/academics/programs/finance/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in Finance. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Dual majors in Business Economics and Finance are required to take six electives in total. Two must be Economics electives and four must be Finance electives.

Note: A strong accounting background is desired by many corporations seeking job candidates with degrees in finance. For those who desire a career in corporate finance, ACC 303 is strongly recommended. FIN 455 is strongly recommended because many entry-level positions in finance require experience with financial modeling using personal computers

Major Experiences

Golden Griffin Fund

The Golden Griffin Fund (GGF) is an investment-management course for both undergraduate seniors and MBA finance majors at Canisius. The fund grew from its initial $100,000 investment from the college's endowment, and is now valued at more than $400,000. The student-run, real-money investment fund is invested in over 30 individual stocks and three equity Exchange Traded Funds. It is specifically designed to educate students about the inner workings of the capital markets, while providing them with real-world learning experiences in investment management and equity analysis. Students apply for the Golden Griffin Fund in their junior year and must have completed FIN 312, before their senior year. In addition to major required courses, students must complete the following courses:

Code	Title	Credits
Required Courses:		
FIN 412	Equity Analysis (fall of senior year)	3
FIN 485	Golden Griffin Fund I (fall of senior year)	3
FIN 486	Golden Griffin Fund II (spring of senior year)	3
Pick 2 of the following		6
ECO 206	Intermediate Macroeconomic Analysis	
FIN 423	Fixed Income Securities	
FIN 455	Financial Modeling with Excel	
FIN 480	Derivative Securities/Options	

Internships

The department also encourages internship experiences as part of the major and accepts one internship on a pass/fail basis as a Finance elective. Many of our majors have participated in the All-College Honors program and have written honors theses on topics in Economics and Finance.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they

provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Required Courses		
Business Core (required courses for all business majors) (p. 251)		49-51
ECO 330	Money, Banking and the Economy [1]	3
or FIN 420	Financial Institutions and Markets	
FIN 312	Investments	3
FIN 414	Portfolio Analysis	3
Finance Electives		
Four courses at the 300 or 400 level [1]		12
Total Credits		70-72

1 Students may receive credit for ECO 330 or FIN 420, but not both.

2 For students majoring in Finance only, ECO 205, ECO 206, ECO 411, and ECO 455 count as FIN electives. For dual ECO & FIN majors, 4 of the 6 electives should be Finance courses.

Finance Electives

Students must take four 300- or 400-level Finance (FIN) or Economics (ECO) courses. Up to 2 of the following courses (with a minimum grade of C- in each) may be substituted for Finance elective credit:

Code	Title	Credits
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3

Accounting courses beyond ACC 212

Additional Course Considerations within the Major

- FIN 455 is strongly recommended for students wishing to pursue careers in banking, securities analysis or other financial services.
- Additional Mathematics courses are strongly recommended for students wishing to obtain graduate degrees in Economics and Finance.
- A strong accounting background is desired by many corporations seeking job candidates with degrees in finance. For those who desire a degree in corporate financial planning, ACC 303 is strongly recommended.

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
ECO 101	ECO 102
ENG 111	ENG 112
Select one of the following:	MAT 106 (or A&S Elective if MAT 109, MAT 111 or MAT 115)
MAT 105 or MAT 109, MAT 111 or MAT 115	MGT 101
ISB 101	PHI 101
RST 101	BUS 102
BUS 101	
Sophomore	
Fall	**Spring**
ECO 255	ECO 256
ACC 201	FIN 201
MKT 201	ACC 202
Field of Knowledge 4	Field of Knowledge 3
Business International Requirement I	Business International Requirement II
	BUS 201
Junior	
Fall	**Spring**
FIN 312	FIN 414
FIN 420 or ECO 330	FIN Elective
MGT 325	Field of Knowledge 1
Field of Knowledge 2 (Ethics)	A&S Elective
Field of Knowledge 6	A&S Elective
Senior	
Fall	**Spring**
FIN Elective	FIN Elective
FIN Elective	MGT 446
MGT 370	A&S Elective
Core Capstone	Free Elective
A&S Elective	Free Elective

Learning Goals & Objectives

Student Learning Goal 1

Graduates will demonstrate an understanding of the theory and practice of Corporate Finance including:

- Objective A: How financial management is accomplished including accompanying ethical issues.
- Objective B: How firms make asset investment decisions.
- Objective C: How firms finance their assets.

Student Learning Goal 2

Graduates will demonstrate an understanding of the theory and practice of Investments including:

- Objective A: The characteristics of the principal investment instruments available in the securities markets.
- Objective B: The factors that determine the value of investment instruments.
- Objective C: The concept of investment risk and how it can be managed.

Student Learning Goal 3

Graduates will demonstrate an understanding of financial markets and institutions including:

- Objective A: The factors which determine interest rates.
- Objective B: Monetary policy and role of the Federal Reserve.
- Objective C: The characteristics of various financial markets and how they are regulated.

Courses

FIN 100 Personal Finance **3 Credits**
This course provides an introduction to the field of personal financial management. You will be introduced to the financial planning process and the following topics: budgeting, time value of money, investment products, risk and return, banking, insurance, credit and debt, income taxes, and retirement planning. This is not a credit bearing elective course for Finance or Economics majors.

FIN 201 Introduction to Corporate Finance **3 Credits**
An introduction to financial analysis. Topics covered include: financial statements, tools of financial analysis, bond and equity valuation, financial management.
Prerequisite: ECO 101, ECO 102, & ECO 255 (may register concurrently).
Offered: fall & spring

FIN 311 Intermediate Corporate Finance **3 Credits**
Examination of the procedures and objectives of capital budgeting, the financing of the firm by means of debt and equity, and short-term and long-term financial management.
Prerequisite: FIN 201.
Offered: fall & spring

FIN 312 Investments **3 Credits**
Introduction to the institutional features of securities trading, portfolio construction, and the capital asset pricing model. Valuation of equities and bonds and an introduction to various derivative instruments.
Prerequisite: FIN 201 & ECO 256.
Offered: fall & spring

FIN 350 Introduction to Financial Planning **3 Credits**
Survey of topics in wealth management and personal financial planning. Review development of the wealth management industry, including the evolution of the high-net-worth investor segment. Various aproaches to asset management, benchmarks for evaluating portfolio performance, risk tolerance, and tax and estate planning issues will be explored.
Prerequisite: FIN 312.
Offered: fall

FIN 351 Estate Planning **3 Credits**
A new course that presents various aspects of estate and gift tax planning. The valuation, transfer, administration and taxation of property will be covered along with strategies to efficiently transfer wealth. Other topics include property law, wills, trusts, income, gift, and death taxation. A course required for those interested in pursuing CFP certification.
Prerequisite: FIN 350.
Offered: fall.

FIN 352 Risk Management & Insurance **3 Credits**
Concepts for risk identification, assessment, and management of insurable risks. Methodologies for risk management in property and casualty insurance, life, accident and health insurance. Principles and modeling for risk pooling, policy pricing, and mortality estimation. Analysis and rationale for the reinsurance market.
Prerequisite: ECO 255 & FIN 201.
Offered: once a year.

FIN 354 Retirement Planning **3 Credits**
Provides an overview of retirement planning including retirement savings need analysis, qualified retirement plan design, Social Security, Medicare, and more. In addition, group life, health, and disability insurance; non-qualified deferred compensation; and other commonly provided employee benefits are examined.
Prerequisite: FIN 312.
Offered: every fall.

FIN 412 Equity Analysis **3 Credits**
The analysis and interpretation of financial information and accounting statements in order to assess security risk and return, credit worthiness, financing needs, and the valuation of the firm.
Prerequisite: FIN 312. Concurrent registration with FIN 485.
Offered: fall

FIN 414 Portfolio Analysis **3 Credits**
An introduction to modern portfolio theory and management. The strategies underlying portfolio construction and evaluation will be examined. The implications of market efficiency on portfolio management will also be considered. Finance Major Assessment will be performed in this class.
Prerequisite: FIN 312.
Offered: fall & spring

FIN 420 Financial Institutions and Markets **3 Credits**
This course examines various financial institutions and the markets in which they operate. The role of the Federal Reserve, commercial banks, thrift institutions, investment banks, insurance companies and pension funds will be examined. Models of interest rate determination including risk structure and term structure will be discussed.
Prerequisite: FIN 201.
Offered: every spring.

FIN 423 Fixed Income Securities **3 Credits**
This course discusses the various types of fixed income securities and the markets in which they are traded. Emphasis is placed on contract evaluation, extracting term/risk structure information from pricing, evaluating investment opportunities and interest rate risk management.
Prerequisite: FIN 312.

FIN 425 Advanced Corporate Finance **3 Credits**
This course provides a more in-depth treatment of corporate financial management. Topics from the introductory course (FIN 311) are developed in greater detail with emphasis on the underlying theories and more extensive applications to financial decision making.
Prerequisite: FIN 311. Offered ocassionally

FIN 455 Financial Modeling with Excel **3 Credits**
Programming in EXCEL via construction of custom functions and macros using Visual Basic. These techniques are applied to a variety of financial models.
Prerequisite: FIN 312.
Offered: Fall

FIN 456 Business Analytics Using R **3 Credits**
This course introduces students to the open source software language R. Students will access publicly available finacial data, process and analyze the data using R code. Analysis of financial ratios, investment portfolios, options, CAPM, Monte Carlo simulation, Value at Risk modeling and market microstructure will be explored.
Prerequisite: FIN 312 or permission of instructor.
Offered: occassionally

FIN 460 International Finance **3 Credits**
Examination of the international monetary system, exchange rate determination, capital flows and various exchange rate regimes. Open economy macroeconomic policies will be discussed.
Prerequisites: ECO 101-102, FIN 201.
Offered: occasionally.

FIN 465 International Banking&Finance **3 Credits**
Examination of international trade finance with a focus on how import/export trade transactions are handled by multinational banks in the global economy. Emphasis is also placed on foreign exchange rates and risk exposures facing large corporations involved in international trade. The course provides practical applications and issues faced by internationally active banking organizations.
Prerequisite: FIN 201.
Offered: fall

FIN 480 Derivative Securities/Options **3 Credits**
Analysis of derivative instruments such as options, futures, swaps, warrants, and convertibles. Emphasis on valuation and use of derivative instruments in hedging risk.
Prerequisite: FIN 312.
Offered: spring

FIN 485 Golden Griffin Fund I **3 Credits**
This is the first course in a two-semester sequence in which students become equity analysts and portfolio managers for a real money portfolio of common equity securities (the Golden Griffin Fund, "GGF"). Students screen companies in the fall semester and perform detailed financial statement and valuation analyses in the spring semester. Current macroeconomic and financial market developments are discussed weekly. Monthly written reports regarding current GGF portfolio positions are produced by the student managers beginning in the summer. Students taking FIN 485 are expected to continue into the spring semester in FIN 486. NOTE: GGF students are selected during an application process during the student's junior year.
Prerequisite: FIN 312; concurernt registration with FIN 412
Offered: fall

FIN 486 Golden Griffin Fund II **3 Credits**
This is the second course in a two-semester sequence in which students become equity analysts and portfolio managers for a real money portfolio of common equity securities (the Golden Griffin Fund, "GGF"). Students screen companies in the fall semester and perform detailed financial statement and valuation analyses in the spring semester. Current macroeconomic and financial market developments are discussed weekly. Monthly written reports regarding current GGF portfolio positions are produced by the student managers beginning in the summer. process during the student's junior year.
Prerequisite: FIN 485
Offered: Spring

FIN 496 Finance Internship **1-4 Credits**
Internships require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

FIN 499 Independent Research **3 Credits**
Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Independent Study Application Form & obtain the approval of a faculty supervisor, department chair & the associate dean.

International Business (BS)

Director: Coral Snodgrass, PhD

Introduction

The forces of globalization have had a dramatic impact on the business world. There have been so many global changes in the business world that people now often say that “doing business” is really doing “international business.” The sheer volume of business that is being addressed is massive in scale. As an example, over $1 billion worth of goods and services are traded each day between the United States and Canada! It is easy to see why companies today are in great need of people who know how to move money around the world, how to find new customers or where in the world to find the best suppliers. These are the skills that you will acquire by studying within the International Business major.

International Business Major

The International Business major at Canisius is unique in the Western New York area because it combines the study of international business topics with those in the realms of modern language studies and international experience. The goals of the program are to help students to understand: (1) what happens in business when an international border is crossed; (2) how business changes when a language other than English is being used; and (3) how to cross an international border when doing business.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the International Business Program webpage (https://www.canisius.edu/academics/programs/international-business/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in International Business. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get

the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Business Core		
Required courses for all business majors (p. 251)		49-51
Additional Major Requirements		
IBUS 301	Fundamentals of International Business	3
MKT 375	International Marketing	3
ECO 460	International Trade	3
or FIN 465	International Banking&Finance	
MGT 472	Comparative Management Systems	3
Elective Requirements		
International Business Electives (3 Courses)		9
Language Requirement: all students are required to complete a modern language sequence through the 217 level.		6
Total Credits		76-78

Major Electives

Code	Title	Credits
The courses below have been approved for use as International Business Electives.		
MGT 380	International Business Seminar	
MGT 440	Global Supply Chain Management	
MGT 475	Doing Business in Latin America	
MKT 478	Global Logistics	
ENT 314	Social Entrepreneurship and Sustainability	
PSC 241	Human Rights and Globalization	
PSC 250	Politics in Latin America	
PSC 355	European Union	
PSC 360	Political Economy of the Developing World	
PSC 452	Politics of Identity in Europe	
PSY 320	Cultural Psychology	
SOC 385	International Migration	

Major Experiences

Study Abroad Requirement: all students are required to complete a study abroad experience. This usually takes the form of a semester abroad during the second semester of the junior year. Alternative programs during the summer are also available. It is not necessary that the language a student has studied be the one spoken in the country in which the student studies abroad. Two of the courses taken during the study abroad experience will also count toward the International Business Requirement in the Business Core curriculum.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
ENG 111	ENG 112
Select one of the following:	MAT 106 (or A&S elective if MAT 109, MAT 111 or MAT 115 was taken in the fall.)
MAT 105 or MAT 109, MAT 111, or MAT 115	PHI 101
RST 101	ECO 102
ECO 101	Business International Requirement (a 216 Level Modern Language Course)
Business International Requirement (a 215 Level Modern Language Course)	BUS 102
BUS 101	
Sophomore	
Fall	**Spring**
MKT 201	FIN 201
ACC 201	ACC 202
Field of Knowledge 4 - History	Field of Knowledge 3 – Arts
ECO 255 (Mathematics Field)	ECO 256
ISB 101	MGT 101
BUS 201	
Junior	
Fall	**Spring**
IBUS 301	MGT 472
MGT 325	IBUS Elective
ECO 460	MKT 375
Field of Knowledge 6 - Science	Field of Knowledge 2 - Philosophy
Field of Knowledge 1 - Religion	A&S Elective
Senior	
Fall	**Spring**
MGT 370	MGT 446
IBUS Elective	IBUS Elective
Free Elective	Free Elective

Core Capstone	A&S Elective
A&S Elective	A&S Elective

Learning Goals & Objectives

Student Learning Goal 1: Students will analyze the international environments in which businesses operate.

Students will be able to:

- Objective A: Examine the elements of societal culture, especially ethics and social responsibility
- Objective B: Identify the critical aspects of the external environment that must be modified when expanding from a domestic to an international market

Student Learning Goal 2: Students will model the data from the international environments to support decision making.

Students will be able to:

- Objective A: Integrate the complex aspects of the international environment into a cohesive decision model.
- Objective B: Find, analyze, and apply international data

Student Learning Goal 3: Students will solve problems related to international competition.

Students will be able to:

- Objective A: Perform international marketing screening processes
- Objective B: Apply models for analyzing competitive positioning in order to develop international market opportunities

Courses

IBUS 301 Fundamentals of International Business **3 Credits**
Study of the international dimensions of the basic functional areas of business. The course begins with a study of the comparative advantage of nations; progresses through the functional areas of accounting, finance, management and marketing; ending with the design of strategies for success in international markets.

IBUS 496 International Business Internship **3 Credits**
Internships require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

IBUS 499 International Business Independent Study **1-3 Credits**
Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Independent Study Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

Required Courses from Other Programs

MKT 375 International Marketing **3 Credits**
Issues involved in marketing products in global markets. The focus is on identifying opportunities in world markets and adapting strategies to fit specific national market needs. Formerly MKT 475.
Prerequisite: MKT 201 or permission of instructor.
Fulfills College Core: Global Awareness
Offered: spring.

ECO 460 International Trade **3 Credits**
Theory and practice of international trade, why countries trade, what explains the patterns of trade, and what are the effects of trade on a country's welfare and income distribution. Analysis of international trade policies and their implications.
Prerequisite: ECO 101 & ECO 102.
Fulfills College Core: Global Awareness

MGT 472 Comparative Management Systems **3 Credits**
International business emphasizing differences in systems. Context and traditions in different countries and regions: social, political, governmental, business, labor, ethical, cultural analysis. Different management and business practices. Managing and doing business within and across many countries. Counts as a MGT elective.
Prerequisite: MGT 101 or permission of instructor.
Offered: spring.

Management (BS)

Chair: Robyn Brouer, PhD

Introduction

Every organization includes individuals whose job it is to coordinate and integrate the activities of employees, manage operations and lead the organization successfully into the future. These individuals are managers.

Management is the art and science of getting things done through people. Good management is necessary for the success of any company or organization. It focuses on accomplishing organizational objectives through the coordination of people and other resources, and involves such activities as planning, organizing, leading, controlling, motivating and general problem solving and decision making. Managers today face the task of leading their companies as they compete in a global marketplace by designing and managing processes that create goods and/or services and add value for customers. They do this in multiple ways. Effective managers empower the workforce to face the challenges of complex and changing environments. They also manage an organization's operational and technological systems to satisfy customers. Such processes are critical in all firms from the smallest entrepreneurial company to the largest multinational corporation. Increasingly, managers and employees also focus on the impact organizational policies and practices on people and the planet.

The management major at Canisius prepares students to perform a variety of roles in business and not-for-profit organizations. The management major and management courses are designed to give students insight into human behavior, to develop students' understanding of organizational issues and processes, and to teach students how to analyze information, make decisions and implement solutions.

The Management Department

The Management program is one of three majors offered by the Department of Management. The department also offers majors in Entrepreneurship and International Business and a variety of academic minors. With 8 full-time faculty, the department is one of the largest in the Richard J. Wehle School of Business. The department also offers a wide variety of co-curricular programs including student chapters of professional organizations, internships and research opportunities. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Management Program webpage (https://www.canisius.edu/academics/programs/management/).

Management Major

The Management major provides students with a balanced education to prepare them for a variety of important organizational roles. The curriculum includes basic coursework in quantitative analytical methods, operations management, behavioral science and human resource management and strategic management.

Students may take additional specialized courses and electives to add depth in one of four management minors: Global Logistics and Supply Chain Management, Human Resource Management, International Management, or Operations Management. Alternatively, they can work with an adviser in the department to choose their electives to fit their individual interests or needs.

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in management. All students must complete a minimum of 120 credit hours to graduate. Students must also maintain a 2.0 grade point average in courses credited toward completion of any minor administered by the Department of Management.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Management majors are encouraged to consider earning dual majors with degree programs in International Business (p. 278), Entrepreneurship (p. 271), or Marketing (p. 287) based on their career goals and aspirations. Students interested in earning a dual major should speak with a departmental advisor early in the college program.

Major Experiences

The management major is designed to give students a breadth of knowledge in a variety of business functions as well as a depth of understanding in operations management and organizational behavior and human resource management. Management electives can be used by students to pursue specific topics based on their interests or career aspirations.

Management majors are strongly encouraged to become actively involved in one of the Canisius College student chapters of professional organizations that are associated with the major: APICS — the Operations Management Society and SHRM — the Society for Human Resource Management. Students pursuing Management minors are expected to be involved in the student organization associated with their minor. The student organizations provide excellent opportunities for leadership development and professional networking through such activities as touring local organizations, attending professional meetings and seminars, and hosting local professionals at campus meetings. Participation in such organizations is an important part of preparation for a career.

Management majors are also strongly encouraged to complete internships (either for credit or not for credit).

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

The Management department offers a number of minor degree programs that are intended to provide attractive supplements to the Management major. Although these minor degrees were designed with Management majors in mind, they are available to any student that has taken the appropriate prerequisite courses. A list of these minors can be found earlier on this page and by clicking the Minors tab above.

Additional Information

Internships

Internships qualifying for three hours of academic credits are available to upper-division students majoring in management. These opportunities involve a work-and-study arrangement with both workplace and faculty supervision. Many are paid. Students completing internships for credit must meet certain departmental requirements. For further information, contact the department chair or your departmental advisor. Non-credit internships are also available and can be a very important part of a student's development and career preparation.

Career Preparation

All management majors are expected to begin planning for their business careers as early as the freshman year. This planning process typically involves taking advantage of the career services offered by the Griff Center for Academic Engagement located in Old Main 016. These services

include assessment tools for identifying attractive careers, resources for researching and exploring different careers, instruction in how to utilize various online tools for conducting a job search, preparation of resumes, interview skills training and other professional development services. The Griff Center staff offers a variety of workshops and seminars as well as providing one-on-one counseling and training to assist students preparing for the world of work. Finally, the Griff Center is the primary point of contact for employers seeking to hire students for internships and full-time jobs. Therefore, it is in students' best interest to work closely with the Griff Center throughout their college years to prepare for their future career.

Curriculum

An Ignatian Foundation

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Free Electives

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Major Requirements

Code	Title	Credits
Business Core		
Required courses for all business majors (p. 251)		49-51
Additional Major Requirements		
MGT 335	Management Science	3
MGT 336	Production/Operations Management	3
MGT 360	Organizational Behavior	3
MGT 364	Human Resources Management	3
Elective Requirements		
Management Electives (3 Courses)		9
Total Credits		70-72

Management Electives

Management majors are required to take three (3) courses that are approved as Management electives. Some courses offered by other programs may be used as management electives. Currently approved Management electives are listed below, although students are encouraged to consult their academic advisor or the advisement guide that is published each semester for any additional courses that may have been added.

Code	Title	Credits
Any MGT course that is not used to fulfull requirments for the Business Core or required courses for the Management Major (listed above)		
ECO 312	GIS and Spatial Economics	3
ENT 311	Entrepreneurship and Family Business	3
ENT 314	Social Entrepreneurship and Sustainability	3
ENT 401	Small Business Management and Entrepreneurship	3
ENT 402	Building a Business: From Idea to Venture Creation	3
ENT 414	Franchising and Entrepreneurship	3
IBUS 301	Fundamentals of International Business	3
MKT 351	Sales Management	3
MKT 471	Doing Business Emerging Mkts	3
MKT 472	Doing Business in Asia	3
MKT 474	Doing Business with Canada	3
MKT 478	Global Logistics	3

Roadmap

Recommended Semester Schedule for Management Major Course Requirements

Freshman

Fall	Spring
ENG 111	ENG 112
Select one of the following:	MAT 106 (or Free Elective if MAT 109, MAT 111 or MAT 115 taken in fall)
MAT 105 or MAT 109, MAT 111 or MAT 115	PHI 101
RST 101	ECO 102
ECO 101 (Field of Knowledge 5 Social Science)	MGT 101
ISB 101	BUS 102
BUS 102	

Sophomore

Fall	Spring
MKT 201	FIN 201
ACC 201	ACC 202
Field of Knowledge 4 History	Field of Knowledge 3 Arts
ECO 255 (Field of Knowledge Math)	ECO 256
Business International Requirement	Business International Requirement
BUS 201	

Junior

Fall	Spring
MGT 335	MGT Elective or MGT minor course
MGT 336	MGT 364 (Spring only)
MGT 360 (Fall only)	Arts and Sciences Elective
Field of Knowledge 6 Science	Field of Knowledge 1 Religion
Field of Knowledge 2 Philosophy (with ethics attribute)	Arts and Sciences Elective

Senior

Fall	Spring
MGT 370	MGT 446
MGT Elective or MGT minor course	MGT Elective or MGT minor course
Free Elective	Free Elective
Arts and Sciences Elective	Arts and Sciences Elective
Core Capstone	Free Elective

Learning Goals & Objectives

Student Learning Goal 1

Management Majors will be able to solve problems in operations management.

Students will:

- Objective A: Analyze the transformations of inputs into outputs through value-added process;
- Objective B: Apply management science techniques and interpret results from such applications.

Student Learning Goal 2

Management Majors will be knowledgeable about leadership and organizations.

Students will:

- Objective A: Understand major theories of leadership;
- Objective B: Evaluate theories of motivation in the workplace;
- Objective C: Understand principles of organizational structure and design.

Student Learning Goal 3

Management majors will be knowledgeable about issues of fairness and equity in the workplace

Students will:

- Objective A: Understand concepts and practices of justice in organizations;
- Objective B: Evaluate managerial practices pertaining to employment discrimination.

Minors

Management Minors

Management (and other business major) students may choose one of the minors below in their junior or senior year and notify the registrar and their department advisor of this decision. Alternatively, they can consult with an advisor in the department to select management electives that meet their individual interests or needs. Students who are not business majors may pursue one of the Management minors to complement their major in another field, but will need to make sure they have taken certain introductory business courses (see note below). Minors available within the Management major are:

- Global Logistics and Supply Chain Management (p. 285)
- Human Resource Management (p. 286)

Note: Non-business majors must take MGT 101 and ECO 255 (or its equivalent) or MAT 105 (or its equivalent) prior to beginning some of the minors.

Management Minor (for Non-Business Majors)

- Management Minor (for Non-Business Majors) (p. 286)

Minor in Industrial/Organizational Psychology

This interdisciplinary program, which is open to management majors, helps students to understand the factors that affect human behavior in the workplace. The program covers a mix of management and psychology courses. For additional information, speak with a departmental advisor and review the course requirements listed on the page below.

- Industrial/Organizational Psychology Minor (p. 232)

Courses

MGT 101 Introduction to Management **3 Credits**
Overview of the managerial functions and processes, including planning, organizing, leading and controlling, addressed from behavioral, economic, historical, and other perspectives.
Offered: fall & spring.

MGT 325 Operations Analysis for Business **3 Credits**
Production/operations management and management science. Decision areas include Operations strategy, process management, quality management, facilities layout, inventory management, aggregate planning and just-in-time systems. Problem-solving techniques include forecasting, linear programming and decision analysis. This is NOT a MGT elective.
Prerequisite: MAT 106 or equivalent (or permission of the instructor).
Offered: fall & spring.

MGT 334 Strategic Sourcing **3 Credits**
This course builds upon the operations management principles discovered in Operations Management and extends them to strategic sourcing and its role in global supply chain management. Strategies, concepts, and terminology pertinent to the study of strategic sourcing will be discussed. Topics to be discussed include: purchasing process, purchasing policy and procedures, supply management integration, commodity strategy development, supplier evaluation and selection, supplier quality management, supply management development, worldwide sourcing, strategic cost management, tools and techniques, negotiation, contract management, law and ethics, trends, and performance measurement. Counts as a MGT elective.
Prerequisite: MGT 325 or MGT 336.
Offered: occasionally.

MGT 335 Management Science **3 Credits**
Introduction to a variety of management science tools and applications including linear programming, forecasting, decision analysis and project management. Quantitative modeling of decision-making problems, with an emphasis on interpretation of results.
Prerequisite: ECO 255.
Offered: every fall.

MGT 336 Production/Operations Management **3 Credits**
The objective of the course is to address how firms manage processes that create goods and/or services and add value for the customer. Decision areas include operations strategy, types of processes, product/ service design, facilities layout, inventory management, aggregate planning, just-in-time systems and supply chain management.
Prerequisite: MGT 101.
Offered: every spring.

MGT 350 Strategic Sustainable Development **3 Credits**
Sustainable development has moved from 'doing good' to 'good business'. Organizations are realizing that sustainable development can have a positive strategic impact on their performance and that a strong business case can be made for such initiatives. This course will examine current issues and trends in sustainable development and their impact on strategy. Counts as a MGT elective.
Offered: occasionally.

MGT 353 History of American Capitalism **3 Credits**
This course explores the development of American capitalism and business system in the United States from Colonial America to the present. Major themes will include the development of the business firm, business-government relations, marketing and advertising, employment relations, and the financial system. Key figures in business and their contributions also will be explored. The study of history will help students gain a richer understanding of the complexities of the business system and help to prepare them for the future as business professionals.
Offered: occasionally.

MGT 360 Organizational Behavior **3 Credits**
Organizational functioning at the individual, group, and system levels. Topics include social perception, communications, leadership and motivation, and organization design. Course includes experiential practice of related managerial skills.
Prerequisite: MGT 101 & sophomore standing.
Offered: fall.

MGT 364 Human Resources Management **3 Credits**
Focuses on a firm's human-resources management activities. Topics include contemporary approaches to strategy, staffing, training & development, performance evaluation, compensation and labor and employee relations.
Prerequisite: MGT 101 & junior standing.
Offered: spring.

MGT 367 Employee and Labor Relations **3 Credits**
Understanding power relationships in the world of work. Formal relationships between management and unions representing employees. Topics include labor history, negotiating, labor/management relations including adversarial as well as labor/management collaboration and managing grievances. Some emphasis on skill development. Counts as a MGT elective.
Prerequisite: MGT 360 & junior standing.
Offered: occasionally.

MGT 370 Managerial Environment **3 Credits**
Managing interplay between business and society, including political, economic, social, legal, international, and ethical environments. Role of market, law, self in control of business, cases, and issues.
Prerequisite: MGT 101 & senior standing.
Offered: fall & spring.

MGT 380 International Business Seminar **3 Credits**
This course offers short-term seminars in Europe or China, either in the winter between the fall and spring semesters or in the summer. Winter trips are typically two-and-one- half weeks and summer trips are typically three weeks. The seminars give exposure to the international business environment and to business practices outside of the U.S. There are readings, discussions, and a substantial paper required. Depending on the specific seminar the costs range from approximately $4500.00 to $7500.00 in addition to normal tuition for the 3 credit hour course. Counts as a MGT Elective.
Restriction: open to upper-level business majors and to others with instructor approval.
Offered: occasionally.

MGT 430 Sustainability and Supply Chains **3 Credits**
Key approaches and issues relating to sustainable operations and supply chain management including analysis of the social and environmental impacts of supply chains, the triple bottom line (people-planet-profit), lean operations, closed-loop supply chains, design for the environment (DFE), remanufacturing, and reverse logistics. Counts as a MGT elective.
Prerequisite: MGT 101.
Offered: occasionally.

MGT 433 Negotiation Theory and Practice **3 Credits**
Explores formal and informal ways that managers negotiate differences. The course considers negotiation with peers, supervisors, subordinates, suppliers, customers, outside agencies and others as a key managerial process and a component of effective leadership. It takes a broad view of negotiations, examining the links between effective negotiation processes and influence, communication and relationship-management. We will examine research and concepts developed in a number of academic fields, and look closely at personal skills and experiences. The course requires intense involvement in negotiation simulation exercises, and thoughtful application of theory and research. Counts as a MGT elective. Pre-requisite: MGT 101
Offered: occasionally.

MGT 436 Quality Management **3 Credits**
This course will provide an overview and understanding of quality management systems and their application to business. This will include such topics as total quality management (TQM), ISO 9000, the Malcom Baldrige Award and Six Sigma (6s). In addition, tools and techniques, and strategies used in quality management will be discussed. Counts as a MGT elective.
Prerequisite: MGT 325 or MGT 336.
Offered: occasionally.

MGT 437 Project Management **3 Credits**
Introduction to the principles and techniques employed by project managers. Focus on entire project life cycle. Critical issues such as time, cost and performance parameters analyzed from organizational and resource management perspectives. Counts as a MGT elective.
Prerequisite: MGT 325 or MGT 335.
Offered: occasionally.

MGT 438 Entry Strategies in Emerging Markets **3 Credits**
This course examines global corporate entrepreneurship and the process through which established companies identify, launch, and manage the entry of existing products into geographic markets where the companies do not currently compete. We will also look at "emerging giants"? -- entrepreneurial firms in emerging markets that have grown to become multinationals. The course examines the differences between emerging markets and mature markets, as well as differences among emerging markets. The objective is to understand how these issues affect business opportunities in different emerging markets and why these efforts often fail. Counts as a MGT elective.
Prerequisite: ECO 101, ECO 102, & MGT 101.
Offered: occasionally.

MGT 439 Special Topics in Operations Planning and Control **3 Credits**
Series of topics designed to target the professional certification examination conducted by APICS (The Association for Supply Chain Management). Topics include: demand management, master planning, capacity management, production activity control, inventory management, purchasing and physical distribution, and theory of constraints. Pre-requisites: MGT325 or MGT336 or Permission of the Instructor
Offered: Ocassionally

MGT 440 Global Supply Chain Management **3 Credits**
This course examines procurement and outsourcing strategies, network configuration, inventory management, supply chain integration, strategic alliances, international issues, coordinated product and supply chain design, demand forecasting, ERP systems, quality and JIT issues and performance measurement in a global supply chain. Counts as a MGT elective.
Prerequisite: MGT 325 or MGT 336.
Offered: every fall.

MGT 446 Managerial Policy/Strategy **3 Credits**
Business students' capstone course. Integration of all business disciplines into discussion of goals, strategies, policies, planning, and evaluation. Cases provide decision-making experience.
Restriction: must be taken in last semester of senior year. Senior status
ffered: fall & spring.

MGT 460 Ethical Power and Influence for Leaders **3 Credits**
Power and influence permeate our everyday lives and are important processes within organizations. Whether it be a company you founded, one you might be working with, or a company you work for, it is vital to understand how power and influence can be used to get things done even if there are barriers in your way. Technical expertise is important, but understanding how to achieve buy-in for your initiatives and goals is vital to your success. This course is about understanding power and influence and learning to use them effectively to achieve your goals. Through self-assessments, you will come to understand your own beliefs and tendencies regarding power and influence. Using this as a starting point, conceptual models are explored to give you real-world approaches in how to use ethical power and influence to become effective leaders. Counts as a MGT elective.
Prerequisite: MGT 101 or permission of instructor.
Offered: every spring beginning spring 2018.

MGT 472 Comparative Management Systems **3 Credits**
International business emphasizing differences in systems. Context and traditions in different countries and regions: social, political, governmental, business, labor, ethical, cultural analysis. Different management and business practices. Managing and doing business within and across many countries. Counts as a MGT elective.
Prerequisite: MGT 101 or permission of instructor.
Offered: spring.

MGT 475 Doing Business in Latin America **3 Credits**
This course is designed to provide an introduction into the Latin American business environment and its impact on management practices. Latin America is a region of resource-rich, with rapidly developing economies with enormous potential for business. Some Latin American countries have experienced, and still are undergoing, drastic political and economic transformation. This course will help students understand the opportunities and business potential as well as risks and barriers of doing business in Latin American countries. This course uses cases that focus on managerial aspects relevant to investment, risk management, and Latin America cultural issues.
Offered: occasionally.

MGT 486 Doing Business in the EU **3 Credits**
This course is designed to prepare students to do business in the EU. Students examine the forces leading to the development and the implementation of the unique economic and political unit called the European Union. Students use their understanding of the history and the current issues impacting the continuing development of the European Union to develop strategies for doing business in the European Union.
Offered: occasionally.

MGT 492 Internship in Global Supply Chain Management **3 Credits**
All for-credit internships require non-routine job experience that links academic concepts with practical experience. Involve supervision by faculty and student demonstration of academic value through papers and reports. Enrollment subject to meeting minimum GPA requirement.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.
Offered: fall & spring.

MGT 493 Internship in Human Resource Management **3 Credits**
All for-credit internships require non-routine job experience that links academic concepts with practical experience. Involve supervision by faculty and student demonstration of academic value through papers and reports. Enrollment subject to meeting minimum GPA requirement.
Prerequisite: student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair, & associate dean.
Offered: fall & spring.

MGT 494 Operations Management Internship **3 Credits**
Internships require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

MGT 496 Management Internship **3 Credits**
All for-credit internships require non-routine job experience that links academic concepts with practical experience. Involve supervision by faculty and student demonstration of academic value through papers and reports. Enrollment subject to meeting minimum GPA requirement.
Prerequisite: student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair, & associate dean.
Offered: fall & spring.

MGT 499 Management Independent Study **6 Credits**
Counts as an MGT elective. Independent studies require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Independent Study Application Form and obtain the approval of a faculty supervisor, department chair, & the associate dean.
Offered: fall & spring.

Global Logistics and Supply Chain Management (GLSCM) Minor

Effective Global Logistics and Supply Chain Management requires the integrated management of the set of value-added activities from product development through material procurement from vendors and manufacturing and distribution of the good to the final customer. Global Logistics is one of the sectors designated by the State of New York as critical to the economic development of Western New York.

Students majoring in Management and pursuing a minor in Global Logistics and Supply Chain Management must complete a minimum of 3 courses (9 credit hours) which are distinct and not counted towards the management major. This includes electives for the management major.

MGT 325 or MGT 336 are prerequisites for many of the elective courses and should be completed by the end of the junior year.

Students majoring in Management and pursuing a minor in Global Logistics and Supply Chain Management must complete a minimum of 3 courses (9 credit hours) which are distinct and not counted towards the management major. This includes electives for the management major.

Code	Title	Credits
Prerequisite Courses		
MGT 101	Introduction to Management	3
ECO 255	Business Statistics (or MAT 105)	3
Required Courses		
MKT 201	Principles of Marketing	3

MGT 336	Production/Operations Management (Management Majors) [1]	3
or MGT 325	Operations Analysis for Business	
MGT 440	Global Supply Chain Management [2]	3
or MKT 478	Global Logistics	
Minor Elective Courses		
Select two of the following:		6
ACC 307	Accounting Information Systems	
ACC 452	Enterprise Systems	
MGT 334	Strategic Sourcing	
MGT 430	Sustainability and Supply Chains	
MGT 440	Global Supply Chain Management [2]	
or MKT 478	Global Logistics	
MGT 475	Doing Business in Latin America (or some other "Doing Business in..." course offered by the business school.)	
MGT 492	Internship in Global Supply Chain Management	
Total Credits		21

1 Management majors complete MGT 336; non-management majors complete MGT 325.

2 Students completing both MGT 440 and MKT 478 may count one of those courses as an elective.

Students in the GLSCM minor are expected to become members of the Canisius Chapter of APICS — The Association of Operations Management.

Human Resource Management Minor

Organizations and employees both benefit when Human Resource Management (HRM) functions are carried out professionally. There is a need for individuals who know how to match what people can bring to the organization with organizational requirements, incentives, and culture. Human Resource Management professionals work with employees to help them develop their potential. They also are responsible for monitoring and adjusting workplace policies and practices to make sure they are fair and transparent.

Students in the Human Resource Management minor are expected to become members of the Canisius Chapter of the Society for Human Resource Management (SHRM) and/or student members of the Buffalo Chapter of the Labor Employment Relations Association (LERA).

Students majoring in Management and pursuing a minor in Human Resources must complete a minimum of 3 courses (9 credit hours) which are distinct and not counted towards the management major. This includes electives for the management major.

Curriculum

Code	Title	Credits
Required Courses		
MGT 360	Organizational Behavior (Fall) [1]	3
MGT 364	Human Resources Management (Spring) [1]	3
MGT 460	Ethical Power and Influence for Leaders (Spring) [1]	3
Minor Elective Courses		
Select three of the following (at least one in COM and one in PSY):		9
COM 204	Interpersonal Communication	
COM 206	Introduction to Research Methods	
COM 302	Small Group Communication (Fall)	
COM 318	Organizational Communication (Fall)	
MGT 353	History of American Capitalism	
MGT 367	Employee and Labor Relations (not offered every academic year)	
MGT 493	Internship in Human Resource Management	
PSY 302	Personality Psychology	
PSY 320	Cultural Psychology	
PSY 329	Leadership and Motivation (Spring)	
PSY 395	Assessment in the Behavioral Sciences (Fall)	
Total Credits		18

1 For non-business majors, MGT 101 can be waived. Alternatively, many non-business majors add a business management minor with ease. Please email the faculty member teaching the course for the waiver.

Management Minor (for Non-Business Majors)

The Business Management minor provides a basic understanding of what it takes to organize and manage complex organizations in the for-profit and not-for-profit sectors. The coursework focuses on achieving results through effective management and leadership. Students have an opportunity to work with instructors who have professional backgrounds in business and to experience a project team environment.

Curriculum

Code	Title	Credits
Required Courses		
MGT 101	Introduction to Management	3
MGT 325	Operations Analysis for Business	3
Select one of the following:		3
ECO 255	Business Statistics (or the equivalent)	
or MAT 105	Finite Mathematics	
Select one of the following:		3
MGT 370	Managerial Environment (with permission of instructor)	
or PHI 242	Ethical Issues in Business	
Select one of the following:		3
MGT 360	Organizational Behavior (Fall)	
MGT 364	Human Resources Management (Spring)	
Electives		
Select two of the following (or other business courses approved by the chair of the Management Department):		6
ENT 201	Entrepreneurial Mind-Set and Foundations (Fall)	
ENT 314	Social Entrepreneurship and Sustainability (Justice attribute) (Spring)	
IBUS 301	Fundamentals of International Business (Fall)	
MGT 360	Organizational Behavior (whichever not taken for the above required 5 courses)	
or MGT 364	Human Resources Management	
MGT 367	Employee and Labor Relations	

MGT 380	International Business Seminar
MGT 430	Sustainability and Supply Chains
MGT 436	Quality Management
MGT 437	Project Management
MGT 440	Global Supply Chain Management
MGT 460	Ethical Power and Influence for Leaders (Fall)
MGT 472	Comparative Management Systems
MGT 475	Doing Business in Latin America
MGT 496	Management Internship
MKT 201	Principles of Marketing
Total Credits	21

Though it is not required, students may want to choose their electives in the Management minor thematically. For example:

Process perspective on management:

Code	Title	Credits
MGT 436	Quality Management	3
MGT 437	Project Management	3
MGT 440	Global Supply Chain Management	3

People perspective on management:

Code	Title	Credits
MGT 360	Organizational Behavior	3
or MGT 364	Human Resources Management	
MGT 367	Employee and Labor Relations	3
MGT 460	Ethical Power and Influence for Leaders	3

International perspective on management:

Code	Title	Credits
IBUS 301	Fundamentals of International Business	3
MGT 380	International Business Seminar	3
MGT 472	Comparative Management Systems	3
MGT 475	Doing Business in Latin America	3

Marketing (BS)

Chair: Gregory R. Wood

Introduction

Marketing is a thrilling and dynamic discipline that helps organizations and individuals become successful by building relationships with customers and other stakeholders and creating products and services that are valued by customers. Every year excitement comes from new product launches, popular advertising campaigns, social media and innovative approaches to doing business in traditional industries. Marketing is global, fast-paced and rewarding. Marketing offers students the opportunity for an exciting career anywhere in the world. Marketing positions are available in all types of global industries ranging from financial services and health care to high technology and telecommunications. The marketing major is designed for students who want a balanced career that rewards both creativity and the ability to achieve strategic objectives.

Marketing positions are available in a variety of consumer, industrial and institutional market areas, including such non-business fields as health care, government administration and cultural development. The marketing program is designed for those who wish to pursue careers in international marketing, brand and product management, global retailing, e-tailing and distribution, marketing research, fashion merchandising, electronic and Internet marketing, sales and sales management.

The marketing curriculum is designed to help students achieve a number of important learning goals (see Learning Goal section below). The faculty annually conduct assessments to determine how well students are progressing toward the achievement of these goals. A process of continuous quality improvement based on these assessments is used to make decisions about curriculum, instructional methods, and the expected goals and objectives. This process is responsible for helping Canisius College maintain a marketing program worthy of national recognition and accreditation by the most well respected professional and academic accrediting organizations in the world. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Marketing Program webpage (https://www.canisius.edu/academics/programs/marketing/).

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in Marketing. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Fashion Institute of Technology

This program combines professional fashion-related education with marketing courses to provide a concentration for students interested in a career in the fashion industry. Students accepted into the program typically spend their senior year in New York City at the Fashion Institute of Technology completing practical coursework in fashion marketing and merchandising leading to an Associates Degree. Students in the program satisfy their Bachelor of Science degree in Marketing using a modified curriculum and therefore should consult with the program director early in their college career (freshman or first semester sophomore year). For further information, contact Dr. Gregory Wood, the F.I.T. program director.

Major Experiences

All students are strongly encouraged to become involved in the Canisius College American Marketing Association (CCAMA) beginning in their freshman year. This organization offers important extra-curricular programs designed to connect students with the business community and help them develop a greater understanding of how marketing concepts are applied in the business world. Participation in this organization is an essential part of your preparation for professional life. Connect with CCAMA on Facebook (https://www.facebook.com/CanisiusAMA/).

Career Preparation

All marketing majors are expected to begin planning for their business careers as early as the freshman year. This planning process typically involves taking advantage of the career services offered by the Griff Center for Academic Engagement located in Old Main 016. These services

include assessment tools for identifying attractive careers, resources for researching and exploring different careers, instruction in how to utilize various online tools for conducting a job search, preparation of resumes, interview skills training and other professional development services. The Griff Center staff offers a variety of workshops and seminars as well as providing one-on-one counseling and training to assist students preparing for the world of work. Finally, the Griff Center is the primary point of contact for employers seeking to hire students for internships and full-time jobs. Therefore, it is in students' best interest to work closely with the Griff Center throughout their college years to prepare for their future career.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

The department offers minors in Information Systems (http://catalog.canisius.edu/undergraduate/wehle-school-business/marketing/information-systems-minor/) and Computer Forensics (p. 134). More detailed information about these programs can be found by clicking the Minors tab at the top of this page.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation.

The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Business Core		
Required courses for all business majors (p. 251)		49-51
Marketing Major Requirements		
MKT 320	Consumer Behavior	3
MKT 331	Fundamentals of Marketing Research	3
MKT 350	Digital Marketing	3
MKT 375	International Marketing	3
MKT 401	Cases in Marketing Management	3
Elective Requirements		
Marketing Electives (2 Courses) [1]		6
Total Credits		70-72

[1] To fulfill this requirement, students may take any additional MKT classes or choose one or more of the following: COM 311, DMA 393, ECO 311, ECO 312, ENT 401, ENT 402, ENT 414, ISB 440, MGT 334, MGT 380, MGT 440, MGT 475, or MGT 492.

Additional Information about the Marketing Curriculum

Cases in Marketing Management (MKT 401) is the capstone course in marketing and requires senior standing. It is also presumed that students will have completed all other required marketing courses prior to taking MKT 401. This course is not a substitute for the Core Capstone course that is a requirement of the College Core Curriculum.

Marketing Major Electives

The curriculum for marketing majors is designed to give students a breadth of knowledge in a variety of business functions as well as a depth of understanding in traditional marketing areas. Marketing electives can be used by students to pursue specific topics based on their interests or career aspirations. Marketing majors are required to take two (2) elective courses (6 credit hours) in marketing or a related discipline.

Additional Course Considerations

Internships qualifying for three hours of academic credit are available to upper-division students majoring in marketing. These involve a work-and-study situation with faculty supervision. Many are paid. Students desiring internships for credit must meet certain departmental requirements. For further information, contact the department chair.

Roadmap

Recommended Semester Schedule for Marketing Major

Freshman

Fall	Spring
ENG 111	ENG 112
Select one of the following:	MAT 106 (or A&S elective if MAT 109, MAT 111 or MAT 115 was taken in the fall.)
MAT 105 or MAT 109, MAT 111 or MAT 115	PHI 101
RST 101	ECO 102

ECO 101	BUS 102
ISB 101	
BUS 101	
Sophomore	
Fall	**Spring**
MKT 201[1]	FIN 201
ACC 201	ACC 202
History Field 4	Arts Field 3
ECO 255	ECO 256
Business International Requirement	Business International Requirement
	BUS 201
Junior	
Fall	**Spring**
MKT 320[2]	MKT 331[3]
MGT 325	MKT 375[3]
Religious Studies Field 1	MGT 370
Science Field 6	Philosophy Field 2 (Ethics required)
MKT 350[2]	A & S Elective
Senior	
Fall	**Spring**
MKT 401[4]	MGT 446
MKT Elective	MKT Elective
A & S Elective	A & S Elective
A & S Elective	Free Elective
Core Capstone	Free Elective

1 Students are strongly encouraged to complete MKT 201 during their sophomore year since it is a prerequisite for required marketing courses taken in the junior and senior year. Failure to complete MKT 201 during the sophomore year may delay your graduation date.

2 Consumer Behavior (MKT 320) and Digital Marketing (MKT 350) are only offered during the fall semester. Students are strongly encouraged to take these courses during the fall of their junior year to avoid a delay in their graduation date.

3 Marketing Research (MKT 331) and International Marketing (MKT 375) are only offered during the spring semester. Students are strongly encouraged to take these courses during the spring of their junior year to avoid delays in their graduation date.

4 Cases in Marketing Management (MKT 401) is the capstone course in the marketing program and is only offered during the fall semester. Students are strongly encouraged to complete all other required marketing courses prior to their senior year. In addition, students are strongly encouraged to take MKT 401 during the fall of their senior year to avoid delays in their graduation date.

Note: All students must complete a total of 60 hours of Arts and Science courses. We strongly recommend that students run a Griff Audit to check for this and any other additional requirements.

Learning Goals & Objectives

Student Learning Goal 1

Marketing Majors will demonstrate knowledge of the principles of marketing.

Students will:

- Objective A: Identify the elements of the marketing mix and demonstrate knowledge about how they provide value to the end user;
- Objective B: Identify the elements of the promotional mix and demonstrate knowledge of their role in marketing;
- Objective C: Identify the stages of the product lifecycle and demonstrate knowledge of how marketing activities change as products move across the different stages.

Student Learning Goal 2

Marketing Majors will demonstrate an understanding of quantitative marketing techniques.

Students will:

- Objective A: Demonstrate skill in performing pricing calculations;
- Objective B: Analyze marketing research data and communicate its results;
- Objective C: Demonstrate skill in deriving marketing insights from analyses of data and facts.

Student Learning Goal 3

Students demonstrate an understanding of domestic buyer behavior.

Students will:

- Objective A: Demonstrate knowledge of learning processes buyers go through in purchase decisions;
- Objective B: Students will demonstrate they know how to apply knowledge about differences between buyers on culture, perceptions, preferences and behaviors for domestic marketing decisions.

Student Learning Goal 4

Students demonstrate an understanding of international marketing.

Students will:

- Objective A: Demonstrate knowledge of the behaviors and influences on behavior for foreign buyers;
- Objective B: Demonstrate knowledge about the different market environments found in foreign countries;
- Objective C: Demonstrate understanding regarding how to adapt domestic marketing programs to the global market.

Student Learning Goal 5

Students demonstrate the ability to solve and communicate solutions to applied marketing problems.

Students will:

- Objective A: Demonstrate the ability to create solutions to marketing situations that require multi-disciplinary integration;
- Objective B: Demonstrate an ability to critically evaluate marketing programs and their performance.

Minors

The decision to pursue one or more minors is based on personal interests, career goals, or planned graduate studies. Minors generally range from six to eight required courses. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. Students must complete the appropriate minor request form.

- Information Systems Minor
- The Inter-Disciplinary Minor in Computer Forensics (p. 134) (co-administered with the Criminal Justice Program)

Courses

MKT 201 Principles of Marketing **3 Credits**
Introduction to the concepts, issues and opportunities associated with marketing management. Marketing strategy, buyer behavior, new product development, product management, price, promotion and channel decisions within context of overall environment and the cornerstones of this course.
Offered: every fall & spring.

MKT 320 Consumer Behavior **3 Credits**
Application of concepts drawn from the behavioral sciences (i.e., anthropology, sociology and psychology) to provide insight into consumer decision-making and buyer behavior.
Prerequisite: MKT 201 or permission of instructor.
Offered: every fall.

MKT 331 Fundamentals of Marketing Research **3 Credits**
Analyzes various techniques for obtaining marketing intelligence for top-level decision-making. Emphasizes marketing research methodologies and evaluation of data from primary and secondary sources.
Prerequisite: MKT 201, ISB 101, ECO 255, & ECO 256.
Offered: every spring.

MKT 350 Digital Marketing **3 Credits**
This course aims to provide students with insight on how modern industry is adopting new emerging media and technologies as marketing tools. Many innovative and evolutionary technologies/media will be introduced, such as blogs, mobile media, in game advertising, virtual reality, hologram, touchscreen, social media, information kiosk in retail setting, including evolved formats of traditional media (e.g., 3-D TV, HD radio, and digital outdoor media). Formerly MKT 450.
Prerequisite: MKT 201.

MKT 370 Special Topics in Digital Marketing and Social Media **3 Credits**
Exact topics to be covered depend on recent advances and applications in digital marketing and social media.
Prerequisite: MKT 201.
Offered: occasionally in fall.

MKT 371 SpecTop in DM:Mkt Data Analyti **3 Credits**
Use of software tools such as Excel, Power BI, Tableau, to analyze marketing data and make informed decisions.
Prerequisite: MKT 201.
Offered: occasionally in fall.

MKT 375 International Marketing **3 Credits**
Issues involved in marketing products in global markets. The focus is on identifying opportunities in world markets and adapting strategies to fit specific national market needs. Formerly MKT 475.
Prerequisite: MKT 201 or permission of instructor.
Fulfills College Core: Global Awareness
Offered: spring.

MKT 397 Search Marketing: SEO & PPC **3 Credits**
Search Engine Marketing (SEM) has become one of the most important marketing strategies for business organizations. SEM involves a variety of techniques designed to increase a company's visibility on popular search engines like Google, Yahoo and Bing. The course will cover Search Engine Optimization (SEO) strategies involving website development and web analytics as well as Pay-Per-Click (PPC) strategies using advertising programs like Google AdWords. As companies increasingly compete to drive customers to their websites, the skills covered in the course are becoming essential for modern marketing professionals and web designers.
Prerequisite: MKT 201.
Offered: occasionally in spring.

MKT 401 Cases in Marketing Management **3 Credits**
Case analysis is used to apply advanced practices and policies concerning product, price, promotion and supply chain marketing to marketing decision making.
Prerequisite: FIN 201, ACC 201, ACC 202, MGT 325 (or either MGT 335 or MGT 336), MKT 201, & MKT 320.
Offered: every fall.

MKT 478 Global Logistics **3 Credits**
This course is an introduction to global logistics and the transportation aspects of the distribution of goods. The advantages and disadvantages of the different modes of transportation and their impact on business decisions are explored in detail. Counts as a Marketing elective.
Prerequisite: MKT 201 & either MGT 325 or MGT 336.
Offered: Ocassionally

MKT 496 Marketing Internship **1-6 Credits**
All for-credit internships require non-routine job experience that links academic concepts with practical experience. Involve supervision by faculty and student demonstration of academic value through papers and reports.
Prerequisite: student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair, & associate dean.

MKT 497 Fashion Industry Studies I **15 Credits**
This course is for students in the Fashion Institute of Technology Program and attending F.I.T. during the fall semester.
Prerequisite: approval of chair or FIT coordinator.

MKT 498 FIT Internship II **15 Credits**
This course is for students in the Fashion Institute of Technology Program and attending F.I.T. during the spring semester.
Prerequisite: approval of chair or FIT coordinator.

MKT 499 Marketing Independent Study/Research **3 Credits**
Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Independent Study Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

School of Education and Human Services

Nancy Wallace, Ph.D., Interim Dean; Lorrei DiCamillo, Ed.D., Interim Associate Dean; Nancy Farrell, Ed.D., Associate Dean; Virginia Carver, Administrative & Data Assistant.

Mission Statement

The faculty of the School of Education and Human Services (SEHS), in concert with our candidates, school/community partners, alumni, and the community, seek to prepare highly effective, socially committed professionals who value the Jesuit traditions demonstrated through their own cura personalis, work towards social justice, and leadership through service. The mission of the unit is to prepare professionals who possess content, pedagogical, and professional **knowledge**; use their gifts in the **service** of others; and demonstrate **professionalism** and **leadership** in their field.

Academic Programs

All teacher preparation programs in the School of Education and Human Services are accredited by the Council for the Accreditation of Educator

Preparation (CAEP). Specific accredited programs include Athletic Training by the Commission on Accreditation of Athletic Training Education (CAATE), and Counseling and Human Services by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). All programs are registered and approved by the New York State Education Department.

The School of Education and Human Services offers curricula leading to undergraduate degrees in a number of areas.

The Teacher Education Department offers undergraduate degree/certification programs in childhood for a dual certification program in childhood education (1-6)/students with disabilities or childhood education (1-6)/teaching English to speakers of other languages (TESOL)(K-12). Each of these programs require candidates to select an academic concentration in one of seven disciplines: English, mathematics, science, social studies, music, Spanish, or social justice. Candidates enrolled in childhood education programs may elect to take two additional courses in middle childhood education and apply for an extension to teach in grades 7 through 9 for all concentrations except social justice, and science. Candidates enrolled in childhood education programs may also elect to take two additional courses in early childhood education to apply for certification to teach birth through grade 2.

Undergraduate degree programs in adolescence education lead to teacher certification (grades 7 through 12) in one of seven academic disciplines: biology, chemistry, physics, English, mathematics, social studies, and Spanish. Candidates enrolled in adolescence education programs may elect to take two additional courses in middle childhood education and apply for an extension to teach in grades 5 and 6.

The Department of Kinesiology offers undergraduate majors in health and wellness, sports and exercise health care, and sport management. Initial teacher certification programs are available in physical education, and a dual certification program in physical and health education. A Professional and Technical Studies undergraduate degree is also offered through the department.

The School of Education and Human Services offers a variety of master's degrees in the departments of Counseling and Human Services (clinical mental health and school counseling), Graduate Education and Leadership (differentiated instruction, educational administration and leadership, educational technologies and emerging media, higher education and student affairs administration, literacy, and TESOL), Kinesiology (physical education, sport administration, sport product development, applied nutrition, community and school health, health and human performance, respiratory care), and Teacher Education (adolescence education, childhood education (1-6)/special education (1-6), childhood education (1-6)/TESOL (K-12), special education-advanced). These programs are described in the Graduate Catalog.

TEACHER EDUCATION CONCEPTUAL FRAMEWORK

Canisius' teacher education programs focus on knowledge, service, leadership and professionalism, the foundational tenets of our conceptual framework. Academic programs offer candidates the content, pedagogical and professional knowledge, skills and dispositions necessary for quality performance in their field of study. Candidates will demonstrate the ability to reflect on their instructional practice, apply knowledge, exhibit skills and develop dispositions essential for success in P-12 schools. In coursework and in practice, candidates will display a clear understanding of the historical, philosophical, sociological, legal and psychological bases of education and educational policy. Candidates must be committed to the education of the whole person and to the belief that all individuals can learn. Within the contexts of their work, candidates promote authentic learning, social and emotional development and a commitment to service and social justice in environments that foster respect for diversity and the dignity of all. Candidates are encouraged to participate in the urban community in which the college is located and, through a variety of field experiences and service-learning opportunities, to interact with an ethnically, racially, culturally, linguistically, religiously and intellectually diverse population. Collaborative projects allow candidates to learn from others, develop a professional orientation and assume positions of responsibility and leadership. Candidates develop the ability to reflect thoughtfully on their experience in order to guide professional development and to improve practice and are encouraged to join professional organizations and actively participate in professional conferences.

Central to our conceptual framework is a symbol of infinity, representing four interrelated and evolving characteristics: Knowledge, Service, Professionalism, and Leadership. These elements are situated within the overarching Ignatian vision and Jesuit educational principles. These values include:

- *Cura personalis*, concern for individuals, and desire to educate the whole person;
- Magis, or seeking the greater good, striving for excellence and desire to have our candidates reach one's full potential;
- Sharing one's gifts in the service for and with others in the pursuit of social justice;
- Contemplation in action, that is being a reflective learner & educator striving for ethical decision-making and mindful creative solutions to today's issues in Education.

To this end, with a vision of P-16 partnership, we strive to engage our students in their chosen field of study. As stated by Rev. Peter-Hans Kolvenbach, S.J., Superior General of the Society of Jesus (2000), "Students, in the course of their formation, must let the gritty reality of this world into their lives, so they can learn to feel it, think about it critically, respond to its suffering and engage it constructively" (p. 8).

PERFORMANCE OUTCOMES

Performance outcomes aligned with knowledge, service and professionalism, and leadership are:

1. **Knowledge**
   The acquisition, creation and dissemination of knowledge is a continuing, transformational process.
   Knowledge Outcomes
   The competent professional:
   - Applies theory and research in practice.
   - Applies effective teacher/counselor/administrator principles.
   - Demonstrates appropriate dispositions, emphasizing student responsibility for behavior and achievement.
2. **Service**
   Each individual has gifts and talents that should be developed to the highest level.
   Service Outcomes
   The competent professional:
   - Is committed to diversity, equity and social justice.
   - Has a sense of purpose and power, and in all endeavors works for the benefit of all learners in their respective human service professions.
   - Demonstrates appropriate dispositions:

- Enthusiasm toward content/subject areas
- Appreciation of social/cognitive/emotional development for all learners
- Appreciation of human diversity
- Values development of students' critical thinking
- Engages in comprehensive and collaborative planning that meets curricular goals
- Commitment to utilizing assessment information to inform decisions

3. **Professionalism/Leadership**
   Each individual has an obligation to improve the world in which they live as advocates for social justice and through a dedication to education as a vehicle for positive social change.
   Professionalism Outcomes
   The competent professional is:
   - An effective communicator.
   - A reflective practitioner.
   - A lifelong learner.
   - Demonstrates appropriate dispositions:
     - Values and utilizes effective communication techniques in professional settings
     - Is committed to, and actively seeks out, opportunities to grow professionally
     - Is committed to advocating for the well-being of children and families
4. **Leadership**
   Each individual applies knowledge, skills, and dispositions in such a way that they positively impact the performance and outcomes of those they teach or serve.
   A competent professional:
   - Is skilled at using outcome data to assess the effectiveness of their own professional practice.
   - Seeks to improve their practice with the goal being to positively impact students/clients.

Dispositions

Dispositions are professional attitudes, values, and beliefs demonstrated through behaviors as candidates interact with peers, students/clients, families, colleagues, and communities. In addition to the fundamental beliefs in fairness and justice, the Canisius College SEHS will foster the following dispositions in its candidates:

- **Enthusiastic** – Demonstrates initiative and commitment towards the educational pursuit
- **Just** – Appreciates value for human diversity and the ideal of fairness
- **Caring** – Demonstrates an attitude of empathy, tolerance and acceptance of others
- **Ethical** – Models behavior embodied in the mission of the School and college, and shows integrity in professional practice
- **Responsible** – Demonstrates personal and professional accountability for themselves and the profession

The SEHS candidate will embody the SEHS dispositions with maturing expertise. With emphasis on the movement from theory to practice, our programs teach candidates to embrace leadership roles that influence classrooms, schools, districts, and communities.

The development and exhibition of dispositions appropriate to teaching all children is a requirement of all Canisius teacher preparation programs. Candidates who demonstrate an unwillingness or inability to act in a mature, respectful and professional manner will be referred to the departmental Candidate Concern Committee for remediation. Outcomes of the remediation plan can include but are not limited to: probationary status for student teaching, prohibited from participation in field experiences, including student teaching, and/or repeating a field experience, including student teaching.

SEHS Learning Goals

SEHS students will embody the characteristics of a Canisius College graduate. Our candidates will meet the college, state, and national standards and demonstrate proficiencies articulated by their discipline.

- Learning Goal 1: Candidates will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.
- Learning Goal 2: Candidates will demonstrate professional skills and dispositions necessary for successful performance in their field.
- Learning Goal 3: Candidates will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.
- Learning Goal 4: Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.
- Learning Goal 5: Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Admission, Assessment and Continued Progress for Education Programs

Although coursework for all teacher certification programs normally begins in the freshman year, continued registration as a major is contingent upon several assessments. Performance is evaluated at four transition points, providing candidates with ongoing and integrated feedback on their progress. The four major transition points are:

1. Entrance into the program
2. Prior to clinical practice
3. After clinical practice
4. Program completion

Transition to each successive level requires successful performance on all measures described at the transition point. Performance measures include outcomes based on InTASC (Interstate Teacher Assessment and Support Consortium) principles, New York State teaching standards, the standards of specialized professional associations, and faculty expectations of knowledge, service, leadership and professionalism. The faculty review the progress of each candidate and, if deficits are noted, a plan is developed to address and remediate shortcomings. Candidates who consistently do not meet program expectations may be counseled out of or dismissed from the program.

Assessment at Transition Point 1 — Program Entrance:

- Acceptance to the college: Standardized test score; high school GPA

Assessment at Transition Point 2 — Prior to Clinical Practice:

Successful final portfolio review (specific program courses)

- Cumulative GPA of 2.75 or higher;
- Grade of C or higher in all education courses;
- Grade of C or higher in content courses for candidates seeking certification at the middle childhood or adolescence level;
- Satisfactory performance in field placements.

Assessment at Transition Point 3 — After Clinical Practice:

Successful final portfolio review

- Satisfactory integrated portfolio reflection;
- Cumulative GPA of 2.75 or higher;
- Grade of C or higher in all education courses;
- Grade of C or higher in content courses for candidates seeking certification at the middle childhood or adolescence level;
- Satisfactory performance in field experience II placements.

Assessment at Transition Point 4 — Program Completion:

- Cumulative GPA of 2.75 or higher
- Grade of C or higher in all education courses
- Grade of C or higher in content courses for candidates seeking certification at the middle childhood or adolescence level
- Successful completion of all program requirements

All candidates for teaching certification develop an assessment portfolio during their program of study. Specific common assignments from selected courses are compiled in Taskstream through which the candidate demonstrates successful performance according to the standards of professional organizations and InTASC. In addition, candidates may use Taskstream supports to develop a showcase portfolio for future job searches.

Certification

To obtain initial teacher certification, candidates must complete the requirements (ie. SAVE, DASA, Child Abuse) and pass the examinations required by the New York State Education Department. The most up to date testing requirements are available on the NYSTCE website (http://www.nystce.nesinc.com/).

For the professional certificate, candidates will need additional professional development, three years teaching experience, and the completion of an appropriate master's degree within five years. Contact the New York State Education Department (http://www.nysed.gov) for additional information.

As required by the New York State Education Department, the pass rates for Canisius College on the New York State Teacher Certification Examinations can be found on the the S (https://www.canisius.edu/academics/our-schools/school-education-human-services/educator-preparation-outcomes/)EHS outcomes page (https://www.canisius.edu/academics/our-schools/school-education-human-services/educator-preparation-outcomes/).

Athletic Training (BS)

The athletic training program at Canisius College has voluntarily withdrawn their accreditation and is no longer admitting students. The date of voluntary withdrawal coincides with the graduation of the last cohort in May 2020.

Co-Chairs: Nicholas Lorgnier and Shawn O'Rourke
Director: Erin F Thornton

Introduction

The Department of Kinesiology offers a Bachelor of Science degree with a major program in athletic training. The major is designed to prepare students to enter the athletic training and allied health fields. Emphasis is placed on the development of cognitive knowledge and psychomotor skills which includes practicum, laboratory and an internship experience. The major is accredited by the Commission on Accreditation of Athletic Training Education (CAATE) and prepares students for the Board of Certification (BOC) examination.

A degree in athletic training (AT) can be the key to an exciting career. Athletic trainers are skilled health care professionals who are involved in the prevention, diagnosis, management and rehabilitation of injuries and illnesses. Our nationally recognized program, taught by faculty members who also have earned national reputations, prepares students for the Board of Certification examination.

Students benefit from a very low student-teacher ratio, and thus a high degree of personal attention. Every semester, AT majors gain hands-on clinical experience which begins in the second year. Our students have a competitive edge in the job market, due to a culminating internship.

Athletic trainers are integral members of the health care team in high schools, colleges, sports medicine clinics, hospitals, physician offices and professional sports teams. Beyond the field of athletic training, our alumni include physical therapists, podiatrists, physician assistants, chiropractors, physicians and secondary school teachers. Information about the tuition and fees at Canisius are available in the Tuition and Fees portion of our catalog (p. 25).

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. The decision may be based on career goals or planned graduate studies. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate

dean. Please note that students will receive only one degree, regardless of the number of majors they complete.

MAJOR EXPERIENCES

All applicants and students in the athletic training major must meet and continue to meet the professional standards of the program. No one who jeopardizes the health or well-being of a patient, classmate or him or herself will be accepted into the program or continue as a student in the program. All applicants and students must possess the necessary physical attributes and exhibit qualities of good judgment and emotional stability. Clinical sites may require a criminal background check prior to placement at the student's expense.

All applicants to the professional phase of the program are required to submit a written acknowledgment indicating that they have read and understood the technical standards related to the professional duties of the discipline. These documents are available on the program website. The athletic training program website also provides additional information for program applicants. The program faculty will be responsible for applying the standards for their students and prospective students.

The health care professional's self-presentation is a vital part of the complex relationship among the patient, the health care provider and the health care delivery site. The athletic training program reserves the right to limit attire and adornments (such as clothing, jewelry, piercing, tattooing) of the body, hands, face and oral cavity. The program handbook outlines the enforcement of this policy. In all cases, the final appeal may be made to the Chair of the Kinesiology Department.

Minors in other dISCIPLINES

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

BOC Exam Results (three year aggregate data)

Fields	Aggregate over 2015-2018
Number of students graduating from the program	19
Number of students graduating from program who took examination	20
Number of students who passed the examination on the first attempt	18
Percentage of students who passed the examination on the first attempt	90
Number of students who passed the examination regardless of the number of attemptsNew Row	19
Percentage of students who passed the examination regardless of the number of attempts	95

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
ATH 170	Emergency Care and Introduction to Athletic Training	3
HED 115	Basic Nutrition	3
HED 205	Wellness and Fitness	3
KIN 235	Kinesiology	3
KIN 336 & 336L	Physiology of Exercise and Physiology of Exercise Lab	4
ATH 132	Practicum in Athletic Training	2
ATH 231	Practicum in Athletic Training	1
ATH 232	Practicum in Athletic Training	1
ATH 261 & 261L	Diagnosis of Injuries/Illnesses I and Diagnosis of Injuries/Illnesses Lab	4
ATH 262 & 262L	Diagnosis of Injuries/Illnesses II and Diagnosis of Injuries/Illnesses II Lab	4
ATH 300	General Medical Diagnostics and Interventions	3
ATH 309	Pathophysiology and Pharmacology for Athletic Trainers	3
ATH 331	Practicum in Athletic Training	1
ATH 332	Practicum in Athletic Training	1
ATH 342 & 342L	Therapeutic Modalities and Therapeutic Modalities Lab	4
ATH 343 & 343L	Therapeutic Exercise and Therapeutic Exercise Lab	4
ATH 361	Psychology of Sport and Mental Health	3
ATH 372	Health Issues for Athletic Trainers	3
ATH 398	Statistics and Research Design	3
ATH 431	Practicum in Athletic Training	3
ATH 482	Administration of Athletic Training	3

ATH 498	Internship in Athletic Training	3
Total Credits		70

Roadmap

Freshman

Fall	Spring
BIO 114 & 114L	BIO 115 & 115L
ATH 170	ATH 132
FYS 101	ENG 101
PHI 101	RST 101
Core	Core
	Core

Sophomore

Fall	Spring
ATH 231	ATH 232
ATH 261 & 261L	ATH 262 & 262L
ATH 342 & 342L	ATH 343 & 343L
KIN 235	HED 205
Core	Core
Core	Core

Junior

Fall	Spring
KIN 336 & 336L	ATH 332
ATH 309	ATH 361
ATH 331	ATH 398
ATH 372	ATH 300
Core	HED 115
Elective	Core

Senior

Fall	Spring
ATH 431	ATH 482
Core	ATH 498
Core	Capstone
Elective	Elective
Elective	Elective

Learning Goals & Objectives

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Athletic Training program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Demonstrate knowledge of how to prevent injury and manage risk of injuries/illnesses
- Recognize the nature and diagnosing extent of injuries/illness
- Demonstrate knowledge of acute injuries/illnesses
- Demonstrate knowledge of athletic training practice in various practice settings, or post professional education programs

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Athletic Training program will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Recognize the nature and diagnosing extent of injuries/illness
- Manage acute injuries/illnesses
- Implement treatment and rehabilitation protocols and reconditioning programs

Learning Goal 3 (SERVICE)

Candidates in the Athletic Training program will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Identify cultural and diversity awareness in patient populations

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Use self-reflection to assess and refine professional practice

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Minor

- Strength and Conditioning Minor (p. 330)

The Strength and Conditioning minor is common minor for athletic training students, human services major and physical education majors, although it is open to any student with the prerequisites. The minor provides students with preparation for the fields of strength and conditioning, wellness, and for related graduate work. It also helps students prepare for specialty certifications through the American College of Sports Medicine, the National Strength and Conditioning Association and the National Academy of Sports Medicine. Strength and conditioning courses have specific pre-requisites, which are stated in the course descriptions.

Admission to the Strength and Conditioning minor is competitive due to a limited number of student slots available and is based on skills and knowledge competencies acquired in BIO 114 and lab, BIO 115 and lab, and KIN 235. Each course must be completed with a grade of C (2.0) or higher. The applicant must attain a minimum C (2.0) cumulative GPA in these five courses and an overall college GPA of C (2.0) or higher. Majors from other departments are eligible for selection by meeting the above requirements. Students interested in the Strength and Conditioning minor at Canisius

College must complete a Change of Major/Minor form. Application for the minor must be completed following enrollment in KIN 235.

Courses

ATH 132 Practicum in Athletic Training **2 Credits**
Didactic and psychomotor skill instruction with practical examinations. Examinations are an integral portion of the acceptance criteria for the program.
Prerequisite: minimum grade of C in both BIO 114 & BIO 114L, and minimum overall GPA of 2.0.
Offered: spring 2017 only.

ATH 170 Emergency Care and Introduction to Athletic Training **3 Credits**
Recognition and immediate care of common illnesses and injuries. Introduction to the profession of Athletic Training.
Offered: fall 2016 Only.

ATH 231 Practicum in Athletic Training **1 Credit**
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in ATH 132. **Restriction:** acceptance into the athletic training education program.
Offered: fall.

ATH 232 Practicum in Athletic Training **1 Credit**
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in ATH 231.
Offered: spring.

ATH 261 Diagnosis of Injuries/Illnesses I **3 Credits**
Theoretical, practical, empirical study of lower extremity, lumbar spine diagnosis and associated illnesses.
Prerequisite: minimum grade of C in ATH 132. **Corequisite:** ATH 231 & ATH 261L.
Offered: fall.

ATH 261L Diagnosis of Injuries/Illnesses Lab **1 Credit**
Laboratory to accompany ATH 261.
Offered: fall.

ATH 262 Diagnosis of Injuries/Illnesses II **3 Credits**
Theoretical, practical, empirical study of upper extremity, thorax, head and cervical spine diagnosis and associated illnesses.
Prerequisite: minimum grade of C in both ATH 231 & ATH 261. **Corequisite:** ATH 232 & ATH 262L.
Offered: spring.

ATH 262L Diagnosis of Injuries/Illnesses II Lab **1 Credit**
Laboratory to accompany ATH 262.
Offered: spring.

ATH 300 General Medical Diagnostics and Interventions **3 Credits**
Theoretical, practical, empirical study of general medical conditions, commonly used diagnostics and interventions for the athletic trainer.
Prerequisite: minimum grade of C in both ATH 231 & ATH 261.
Offered: spring of even-numbered years.

ATH 309 Pathophysiology and Pharmacology for Athletic Trainers **3 Credits**
Discussion of the physiologic changes that occur following injuries and illness. Discussion of indications, contraindications and legal issues regarding medications used in the management of athletic injuries.
Corequisite: ATH 231 or ATH 331.
Offered: fall of even numbered years.

ATH 331 Practicum in Athletic Training **1 Credit**
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in ATH 232.
Offered: fall.

ATH 332 Practicum in Athletic Training **1 Credit**
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in ATH 331.
Offered: spring.

ATH 342 Therapeutic Modalities **3 Credits**
Therapeutic modality use in treatment of orthopedic injuries. Physics, physiological effects, rationale and application of modalities in health care of patients. Practical examinations.
Prerequisite: minimum grade of C in ATH 132. **Corequisite:** ATH 231 & ATH 342L.
Offered: fall.

ATH 342L Therapeutic Modalities Lab **1 Credit**
Laboratory to accompany ATH 342.
Corequisite: ATH 342.
Offered: fall.

ATH 343 Therapeutic Exercise **3 Credits**
Contemporary exercise and clinical intervention techniques used in the management of orthopedic injuries. Biomechanics, physiological effects, rationale and application of exercise techniques and devices. Practical examination.
Prerequisite: minimum grade of C in KIN 235. **Corequisite:** ATH 232 & ATH 343L.
Offered: spring.

ATH 343L Therapeutic Exercise Lab **1 Credit**
Laboratory to accompany ATH 343.
Corequisite: ATH 343.
Offered: spring.

ATH 361 Psychology of Sport and Mental Health **3 Credits**
This course address sport psychology from a sports studies perspective incorporating interdisciplinary knowledge from the social sciences. It is an appropriate approach for many students seeking to understand the psychological processes facing athletes in a competitive environment. Considerable interest surrounds the efforts of sport psychologists to optimize the performance of those characters we call athletes - the sport heroes of our society. Superior athletic performance has long held great intrigue. Tremendous improvements in the identification and measurement of the psychological factors related to athletic performance have resulted in significant improvements in an athlete's ability to produce top level performance on a consistent basis. This course focuses on the application of these psychological principles by athletes, coaches and sport psychology consultants in what has been a quest to produce the ultimate athlete/.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.

ATH 372 Health Issues for Athletic Trainers **3 Credits**
Current content and practices related to personal, school and community health as it relates to the management of injury and illness.
Offered: fall of odd numbered years.

ATH 398 Statistics and Research Design **3 Credits**
Application and interpretation of descriptive and inferential statistics. Library search techniques and research design as related to evidence based practice. Includes the use of statistical software, data collection, and creation and presentation of a research poster.
Prerequisite: minimum grade of C in KIN 235.
Fulfills College Core: Field 7 (Mathematical Sciences)
Offered: fall & spring.

ATH 431 Practicum in Athletic Training **3 Credits**
Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.
Prerequisite: minimum grade of C in ATH 232. **Restriction:** acceptance into the athletic training education program.
Offered: fall.

ATH 482 Administration of Athletic Training **3 Credits**
Theoretical, practical and empirical study of administrative requirements of the athletic trainer relative to facility design, duties, liability, drug testing, nomenclature and injury epidemiology.
Prerequisite: minimum grade of C in both ATH 231 & ATH 261.
Offered: spring of even-numbered years.

ATH 498 Internship in Athletic Training **3 Credits**
Field-based experience in athletic training or related health care field. Requires 150 clock hours over twelve weeks.
Prerequisites: ATH 331 grades of C or above, Permission of Chair then Associate Dean. Fall/Spring/ Summer

Educator Preparation

Mission Statement

The faculty of the School of Education and Human Services (SEHS), in concert with our candidates, school partners, alumni, and the community, seek to prepare highly effective, professional, and socially committed educators and counselors who value the Jesuit traditions demonstrated through their own cura personalis, work towards social justice, and leadership through service. The mission of the unit is to prepare educators who possess content, pedagogical, and professional **knowledge**; use their gifts in the **service** of others; and demonstrate **professionalism** and **leadership** in their field.

Canisius College offers undergraduate majors that lead to initial teacher certification in the areas described in the majors tab above.

Majors

- Adolescence Education (p. 305)
- Physical Education (p. 314)
- Physical Education/Health (p. 318)
- Special Education Childhood (p. 324)
- Teaching English to Speakers of Other Languages (TESOL) Childhood (p. 309)

Minor

A minor in education can provide students with skills that will be useful when teaching in a variety of settings, including informal education. This minor is available to students in any non-education major. This minor does not lead to teacher certification.

Students must complete 6 courses for the minor (18 credit hours).

Code	Title	Credits
Foundations (Choose 1)		3
EDU 250	Foundations of Education	
HSV 300	Social and Cultural Diversity	
HSV 301	Social Policies	
Human Development (Choose 1)		3
EDE 100	Human Growth and Development - Birth through Childhood	
EDS 101	Human Growth and Social Development: Adolescence	
General Skills for Teaching (Choose 2)		6
ECCH 221	Emergent Literacy	
EDS 223	Foundations of Adolescent Literacy	
EDU 100	Exploring the Teaching Profession	
EDU 123 & EDU 223 & EDU 323	Technology in Education 1 and Technology in Education 2 and Technology in Education 3	
SPE 341	Inclusive Strategies	
Minor Electives (Choose 2) [1]		6
ABEC 335	Conservation Education	
PED 305	Outdoor Curriculum and Cooperative Activities	
HSV 400	Management of Human Service Agencies	
HSV 450	Research in Human Services	
One course from foundations, human development, or general skills for teaching listed above that was not used to fulfill that area's requirement.		
Total Credits		18

[1] Additional courses may be appropriate and will be approved on a case-by-case basis.

Courses

Early Childhood/Childhood (ECCH) (p. 297), Elementary Education (EDE) (p. 298), Secondary Education (EDS) (p. 298), Teacher Education (EDU) (p. 299), Early Childhood Ed (EDY) (p. 300), Health & Phys. Education (HED) (p. 300), Physical Education (PED) (p. 301), Special Education (SPE) (p. 303), Teaching English to Speakers of Other Languages (TESL) (p. 304)

Early Childhood/Childhood (ECCH)

ECCH 221 Emergent Literacy **3 Credits**
Examines theories of language development and implications for practice. Strategies are presented to facilitate emergent and developing literacy skills in young children and to develop fluent readers and writers throughout the elementary years. Includes twenty pages of polished prose including a literature review, literature project and lesson plans.
Offered: every spring.

ECCH 222 Literacy and the Arts in the Elementary Classroom **3 Credits**
Examines effective methods for assessing children's literacy skills and for developing targeted instruction that reinforces, remediates and/or enriches literacy learning. Issues related to the literacy learning of all children, including children with disabilities and children from linguistically and culturally diverse backgrounds are examined. Research-based early intervention programs will be examined. Includes 30 hours of field experience in grades PreK-6.

ECCH 412 Managing the Early Childhood and Elementary Classroom **3 Credits**
Develops understanding of how to build classroom communities and organize the classroom for student success. Discusses the importance of a proactive approach to prevent behavior problems and investigates a variety of classroom management strategies. Strategies for collaborating with diverse families and other professionals will be explored, including strategies for co-teaching.
Prerequisite: SPE 311 & EDU 356. **Corequisite:** SPE 330.
Offered: occasionally.

Elementary Education (EDE)

EDE 100 Human Growth and Development - Birth through Childhood **3 Credits**
Introduces multiple dimensions of development including influence of family, culture and society. Examines physical, cognitive, emotional and behavioral theories and emphasizes education's role in promoting wellness.
Fulfills College Core: Field 5 (Social Sciences)

EDE 390 Cognition and Learning - Birth through Childhood **3 Credits**
Investigates theories of learning and current brain research. Integrates emotion and motivation and the neurological basis for learning. Analyzes formal and informal procedures for reporting student progress.
Offered: every fall.

Secondary Education (EDS)

EDS 101 Human Growth and Social Development: Adolescence **3 Credits**
Introduces human developmental processes and variations in the middle and high school years including physical, cognitive, social, and emotional perspectives. Effects of behavioral and cognitive processes, motivation, and diversity on student performance will be emphasized.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall.

EDS 223 Foundations of Adolescent Literacy **3 Credits**
Focuses on three strands of literacy teaching for adolescent students: strategies for developing reading and writing skills in all secondary content areas, methods for reading and writing in inquiry projects, and pedagogical practices for integrating critical literacy in all secondary classrooms.
Fulfills College Core: Advanced Writing-Intensive
Offered: fall.

EDS 224 Adolescent Literacy in a New Literacies World **3 Credits**
This course addresses the multiple literacies that adolescents use to make meaning in the world. The focus is on the integration, implementation and assessment of New Literacies in the content areas. Requires 20 hours of field placement.
Offered: spring only.

EDS 360 Evaluation and Teaching Strategies **3 Credits**
Addresses instructional planning, curriculum development, formal and informal assessment methods and reflecting on one's own teaching practice. Highlights instruction modifications and various resources to enhance teaching. Requires 30 hours of field placement.

EDS 370 Young Adolescent Literature **3 Credits**
Prepares teacher candidates to teach young adult literature to adolescents, grades 7-12. Candidates will consider what, why and how literature is currently taught and learned in middle and high school classrooms. National and state standards, curriculum and assessment, literature of diverse cultures, as well as contemporary theory and research in English Language Arts will be focal points.
Offered: occasionally.

EDS 390 Cognition, Learning and Assessment of Adolescence **3 Credits**
Focuses primarily upon seminal learning theories in order to examine the dynamic nature of knowledge and how changing epistemological positions can affect teaching and learning. Addresses learning processes and the roles that language, motivation, intelligence, creativity and other social processes play in student performance. Emphasis upon instructional design, pedagogical decision making and assessment procedures and instruments.Choose the appropriate course from EDS 402, 403, 404,405, 406:.

EDS 402 Methods of Teaching English: Adolescence **3 Credits**
Combines theory and practice to encourage sound, research-based pedagogical strategies for the teaching of English Language Arts for middle and high school students. Focuses on available teaching materials and multiple approaches to teaching literature, writing, grammar and language development, as well as technology integration. Effective lesson planning and unit planning are emphasized.
Prerequisite: EDS 360.
Offered: spring only.

EDS 403 Methods of Teaching Mathematics: Adolescence **3 Credits**
Combines theory and practice to encourage sound, research-based pedagogical strategies for the teaching of Mathematics for middle and high school students. Focuses on available teaching materials and multiple approaches to teaching, including technology applications. Effective lesson construction and unit planning are emphasized.
Offered: spring only.

EDS 404 Methods of Teaching Modern Languages: Adolescence **3 Credits**
Combines theory and practice to encourage sound, research-based pedagogical strategies for the teaching of foreign languages for middle and high school students. Focuses on available teaching materials and multiple approaches to teaching the grammar, literature and culture of French, German, and Spanish-speaking countries, as well as technology integration. Effective lesson planning and unit planning are emphasized.
Prerequisite: EDS 360.
Offered: spring only.

EDS 405 Methods of Teaching Science: Adolescence **3 Credits**
This course focuses on developing a rich intellectual life through study, reflection and practice. Students will have discussions on Philosophy of Science, the philosophy of individual science disciplines and pertinent Education Psychology theories as applied to science teaching. Current research-based science teaching techniques will be emphasized. Students will write reflection papers and use these theories and principles in classroom exercises and presentations. Requires a working knowledge of at least one science discipline.
Prerequisite: EDS 360.
Offered: spring only.

EDS 406 Methods of Teaching Social Studies: Adolescence **3 Credits**
This course addresses the objectives, methods, curricula, materials and assessment necessary for teaching social studies at the secondary level. Students will examine topics such as teaching for democratic citizenship, authentic instruction and assessment, multicultural social studies curriculum, and technology in the social studies classroom. This course models various instructional strategies and includes practical assignments and experiences for students.
Prerequisite: EDS 360.
Offered: spring only.

EDS 432 Applied Methods of Teaching English: Adolescence **3 Credits**
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the adolescent level. Requires 50 hours of field experience.
Prerequisite: EDS 402.
Fulfills College Core: Oral Communication
Offered: fall only.

EDS 433 Applied Methods of Teaching Mathematics: Adolescence **3 Credits**
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the adolescence level. Requires 50 hours of field experience.
Prerequisite: EDS 403.
Fulfills College Core: Oral Communication
Offered: fall only.

EDS 434 Applied Methods of Teaching Modern Languages: Adolescence **3 Credits**
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the adolescence level. Requires 50 hours of field experience.
Prerequisite: EDS 404.
Fulfills College Core: Oral Communication
Offered: fall only.

EDS 435 Applied Methods of Teaching Science: Adolescence **3 Credits**
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the adolescence level. Requires 50 hours of field experience.
Prerequisite: EDS 405.
Fulfills College Core: Oral Communication
Offered: fall only.

EDS 436 Applied Methods of Teaching Social Studies **3 Credits**
Includes practica and seminars that focus on professional reflection and topics related to teaching diverse students, authentic intellectual work, classroom management, and teaching to higher standards. Requires 50 hours of field experience.
Prerequisite: EDS 406.
Fulfills College Core: Oral Communication
Offered: fall only.

EDS 493 Supervised Student Teaching **12 Credits**
Highlights knowledge, skills and dispositions of professional educators. Two full-time seven-week placements in adolescent classrooms require candidates to become the instructional leader under the supervision of cooperating teachers and college faculty.
Prerequisite: minimum GPA of 2.70, minimum grade of C in each required subject area course (modern language majors must also pass oral proficiency interview), minimum grade of C in each required education course, interview. Some schools may require certain health tests. **Corequisite:** EDU 497 & EDU 498. **Restriction:** no other courses allowed.
Offered: generally spring but occasionally fall (for special cases).

EDS 499 Independent Study **3 Credits**
Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Teacher Education (EDU)

EDU 100 Exploring the Teaching Profession **3 Credits**
This course introduces the study of education and teaching, with opportunities for students to examine and evaluate this career choice. The course utilizes a field-based component to connect seminar session topics with actual classroom practice. In addition to reflection on their experiences, students will examine the following critical topics in schools: current initiatives and issues, exemplars of good teaching, diverse needs of students, curriculum, culture, organization, and the multiple roles and professional and ethical expectations of teachers. Most importantly, it is mission-centric in that is promotes teachers' roles as change agents for social justice. Students will complete a 10-hour Service Learning experience in a local public school.
Fulfills College Core: Field 5 (Social Sciences)
Offered: Spring/Fall

EDU 123 Technology in Education 1 **1 Credit**
Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.
Offered: fall & spring.

EDU 223 Technology in Education 2 **1 Credit**
Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.
Offered: fall & spring.

EDU 250 Foundations of Education **3 Credits**
Addresses social, philosophical, legal, historical, organizational, theoretical perspectives on education, including multicultural perspectives. Highlights rights and responsibilities of teachers, students and others involved in education.
Fulfills College Core: Justice
Offered: fall & spring.

EDU 272 Teaching Social Studies Integrating English Language Arts **3 Credits**
Addresses the objectives, curriculum, strategies, materials and evaluation necessary for teaching social studies content while integrating standards in English Language Arts. Emphasizes historic, geographic, economic, political ad social concepts highlighting the New York State Standards in SS and ELA.
Prerequisites: ECCH 221 and ECCH 222.
Offered: every spring.

EDU 323 Technology in Education 3 **1 Credit**
Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.
Offered: fall & spring.

EDU 356 Assessment for Diverse Learners **3 Credits**
Emphasizes the empirical basis for various models of assessment. Analyzes formal and informal assessment strategies including standardized tests, curriculum-based assessment, norm-referenced, criterion-referenced assessment, and alternative methods of evaluation. Highlights use of assessment to promote decisions in planning, teaching, and evaluating for instructional program improvements for grades 1 - 6.
Corequisite: SPE 311.
Offered: every fall.

EDU 410 Writing in the Schools **3 Credits**
Emphasizes integrating current theories of writing into classroom curricula. Students develop their own composing abilities and strengthen their ability to teach writing in school settings. Open to all Education and Adolescence Education concentrations.
Offered: occasionally.

EDU 428 Teaching Math & Science: Supporting STEM Education **3 Credits**
Examines inclusive methods and strategies across all mathematical strands and science disciplinary core ideas. Highlights research-based curricular guidelines for STEM education aligned with the New York State's Mathematics, Science and Technology standards. Emphasizes problem solving, inquiry skills and assessment practices.
Prerequisites: ECCH 221 & ECCH 222. **Restrictions:** must be a senior.
Offered: fall.

EDU 432 Pre Student Teaching **3 Credits**
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the special education-childhood level. Requires 50 hours of field placement.
Offered: fall only.

EDU 493 Student Teaching **12 Credits**
Highlights knowledge, skills and dispositions of professional educators. One full-time 7-week placement in each childhood and special education-childhood classroom requires candidates to become the instructional reader under the supervision of cooperating teachers and college faculty.
Prerequisite: signature, minimum GPA of 2.70, minimum grade of C in each required education course, some schools may require certain health tests.
Corequisite: EDU 497 and EDU 498.

EDU 494 Capstone Seminar for Teacher Candidates **3 Credits**
This seminar will be the culminating course that complements student teaching education majors. EDU 494 will revolve around assessments of how well teacher candidates can integrate theoretical principles and core attributes into the practical work of student teaching. Teacher candidates will complete readings, engage in classroom discussions and construct artifacts that will be assessed for their integration of pedagogical knowledge with issues of diversity, ethics, global awareness and social justice. The artifacts will demonstrate how well each teacher candidate's understanding of the four core knowledge attributes is contributing to his or her development as a teacher.
Restrictions: Senior Teacher Education majors only.
Offered: every fall.

EDU 495 Child Abuse Workshop **0 Credits**
Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 496 Prevention of School Violence Workshop **0 Credits**
Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 497 Dignity for All Students Act (DASA) Workshop **0 Credits**
Provides six hours of training on the components of the Dignity Act, how school climate impacts students achievement and behavior, understanding diversity and multi-cultural environments, and understanding bullying, harassment and discrimination, including indicators, early warning signs, prevention and intervention and how to interact with families of victims and aggressors.

EDU 498 Student Teaching Seminar **3 Credits**
Student Teaching Seminar enhances the student teaching experience through opportunities to foster professional growth and guided reflection on planning, instruction and assessment of learning. The course provides a professional learning community to assist candidates in the transition to careers in teaching.

EDU 499 Independent Study **3 Credits**
An independent study requires the signature of the department chair and the associate dean. Independent studies require an application and approval by the associate dean.
Prerequisite: signature of the program director & associate dean.

Early Childhood Education (EDY)

EDY 208 Infant/Toddler Care and Education **3 Credits**
This course utilizes developmental theory and research findings to examine issues of attachment, perception, motor skills, cognition, language, emotions and social skills in children birth through age three. An emphasis is placed on understanding children in the context of family and culture. Requires 10 hours of field placement: infant/toddler.

EDY 209 Developmentally Appropriate Curriculum in Early Childhood Classrooms **3 Credits**
Emphasizes research-supported practice for enhancing children's physical, cognitive, social, emotional and behavioral development within the framework of the New York State Standards. Focuses on developmentally appropriate learning opportunities. Requires 10 hours of field placement: PreK/K.

Health & Phys. Education (HED)

HED 115 Basic Nutrition **3 Credits**
This course will address all aspects of proper nutrition. The class will address material such as macronutrients, micronutrients, daily caloric intake and portion sizes. Students will gain knowledge of nutrition through class lectures, interactive activities and peer presentations. Upon successful completion of the course, students will have a working knowledge of proper nutrition and appropriate dietary habits.
Offered: fall & spring.

HED 205 Wellness and Fitness **3 Credits**
Lecture and laboratory. Skills, teaching methods, resource units, evaluative instruments, teaching aids, leading to an overall understanding of the principles of health and wellness. Focus on physical fitness testing, cardiovascular exercise, muscular strength, muscular endurance, flexibility and body composition. There is additional focus on special populations, childhood obesity and the development of a personal fitness program.
Prerequisite: BIO 114 & BIO 114L.
Offered: every fall & spring.

HED 220 Healthy Behaviors **3 Credits**
Examines health determinants and the effects on all seven dimensions of health. Assessment of personal lifestyle behaviors and factors influencing current and relevant health issues. Emphasis on personal behavior modification to practice health-enhancing behaviors and to reduce health risks. Guidelines for healthy practices related to nutrition, mental health, cancer prevention, HIV/STDs, cardiovascular disease, stress management, sexuality, physical fitness, drugs and alcohol and relationships. Establishes foundation for living healthy and productive lives.
Offered: fall & spring.

HED 308 Early Field Experience Health **0 Credits**
The teacher candidate will participate in K-12 school level health education. To successfully complete this experience the candidate will complete a 30 hour placement with an assigned local health educator.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.

HED 321 Lifeguard, C.P.R., First Aid, WSI **3 Credits**
Knowledge, skill techniques and appreciations necessary to meet certification requirements of the American Red Cross. Certification fee required for this course.
Prerequisite: department swimming test and completion of departmental recommendation. **Restriction:** must be in the undergraduate or graduate must be physical education program.
Offered: fall.

HED 325 School Health **3 Credits**
Students explores the most prevalent health and safety issues of schoolaged children and youth and examines rationale for health education, theories, methods, strategies, and techniques of health education program planning. Additionally, students will plan effective comprehensive school health education programs: integration of school and community services.
Restriction: must be physical education or physical and health education major.
Offered: spring.

HED 326 School Health Curriculum **3 Credits**
Students will practice strategies and methodologies needed for effectively teaching health education. Students will participate in 50 hours of field experience, if they have not already done so, and will analyze experiences as a process to improving instruction. Students will demonstrate their ability to plan for instruction by writing and implementing learning experiences that meet the National Health Education Standards.
Restriction: must be physical education or physical and health education major.
Offered: fall.

HED 337 Exercise Principles and Applications **3 Credits**
This course will address the many aspects of fitness and exercise. Students will experience classroom lecture as well as practical experience in the weight room and other alternative exercise facilities. Students will gain experience in the proper design of exercise programs and will understand the importance of periodization as it relates to exercise. Upon successful completion of this course, the student will have a vast knowledge of the principles surrounding strength and conditioning.
Prerequisite: minimum grade of C in BIO 114 & BIO 114L.
Offered: fall & spring.

HED 361 Psychology of Sport and Mental Health **3 Credits**
This course address sport psychology from a sports studies perspective incorporating interdisciplinary knowledge from the social sciences. It is an appropriate approach for many students seeking to understand the psychological processes facing athletes in a competitive environment. Considerable interest surrounds the efforts of sport psychologists to optimize the performance of those characters we call athletes - the sport heroes of our society. Superior athletic performance has long held great intrigue. Tremendous improvements in the identification and measurement of the psychological factors related to athletic performance have resulted in significant improvements in an athlete's ability to produce top level performance on a consistent basis. This course focuses on the application of these psychological principles by athletes, coaches and sport psychology consultants in what has been a quest to produce the ultimate athlete.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.

HED 425 Evolution of Disease and Illness **3 Credits**
Overview of humanity's triumphs and failures in the ongoing fight against illness and disease. Explores history of disease, current health issues and trends to determine outlook for emerging health concerns of the future. Examines various models of disease to explain disease agents and route of transmission throughout the body's systems. Analysis of disease occurrence, predisposing factors, body's immune response, symptoms, prevention, treatment and control.
Offered: fall & spring.

Physical Education (PED)

PED 203 Lifetime and Fitness Activities **3 Credits**
A content-focused physical education course that includes an emphasis on sport and fitness being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports, it also serves to expose students to other cultures that participate in these lifetime activities. Improving or maintaining fitness will be the focus of this class and might include activities like, but not limited to yoga, pilates, resistance training, spinning, running, fitness walking, fitness swimming, water polo, kickboxing, cardio-kick, zumba and exergaming. A 4-5 week unit on aquatics will also be included in this course. The course also provides coinciding opportunities to gain awareness of cultural variations and regional circumstances, through the lens of a particular sport. Students will be required to demonstrate movement competence in various sports and activities.
Fulfills College Core: Global Awareness
Offered: spring of odd-numbered years.

PED 204 Games and Sports **3 Credits**
A content-focused physical education course that includes an emphasis on sport being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports, it also serves to expose students to other cultures that participate in these activities. This includes the games categories of invasion, net/wall, target and fielding/striking. It also provides coinciding opportunities to gain awareness of cultures, and communities, and societies, through the lens of a particular sport. Students will be required to demonstrate movement competence in various games categories (invasion, net and target, etc.).
Fulfills College Core: Global Awareness
Offered: fall of odd-numbered years.

PED 207 Individual Performance and Dance Activities **3 Credits**
Students will learn appropriate organization and teaching progressions for various forms of individual-performance and dance activities taught in the P-12 curricula. Might include, but are not limited to gymnastics, figure skating, track and field, multi-sport events, in-line skating, wrestling, self-defense and skateboarding. Dance or rhythms activities that may focus on, but not limited to dance forms such as creative movement and dance, ballet, modern, ethnic/folk, hip hop, Latin, line, ballroom, social and square.
Offered: spring of even-numbered years.

PED 305 Outdoor Curriculum and Cooperative Activities **3 Credits**
Philosophy, teaching methods, programming and safety management. Activities may include initiatives, new games, problem solving, trust activities, ropes course, cycling, mountain biking, rock climbing, rappelling, cross-country skiing and others.
Offered: fall of even-numbered years.

PED 306 Early Field Experience Elementary Physical Education **0 Credits**
The teacher candidate will participate in K-6 elementary physical education. To successfully complete this experience the candidate will complete a 30 hour placement with an assigned local physical educator.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.

PED 307 Early Field Experience Secondary Physical Education **0 Credits**
The teacher candidate will participate in 7-12 secondary physical education. To successfully complete this experience the candidate will complete a 30 hour placement with an assigned local physical educator.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.

PED 311 Movement Education and Elementary Activities **3 Credits**
Conceptual bases, perceptual-motor development and practical applications of movement education. Development, implementation and integration of a physical education program; teaching strategies geared to the elementary level classroom with emphasis on New York and national learning standards in Physical Education. Field experience required.
Restriction: must be physical education or physical and health education major.
Offered: spring.

PED 351 Coaching Theory and Techniques **3 Credits**
Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children and young adults. Many participate at the 'house' league level, while others are involved with more competitive and elite programs. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, ethics and values clarification. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.
Offered: fall.

PED 354 Adapted Physical Education **3 Credits**
Designed to provide students with an exposure to education, physical education, sport and recreational programming for children with disabilities. Content focuses on variety of disabilities eligible for service under the Individuals with Disabilities Act (IDEA) and the ability to design, conduct, and assess a physical education program that is appropriate for this population. Service-Learning required.
Restriction: must be physical education or physical and health education major.
Fulfills College Core: Diversity
Offered: fall.

PED 360 Human Growth and Motor Development **3 Credits**
Examination of principles of growth and developmental theory with an emphasis on factors affecting changes in movement potential of individuals.
Restriction: must be physical education or physical and health education major.
Offered: fall.

PED 365 Principles and Philosophy of Coaching **3 Credits**
Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children, young adults and students. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, practice planning, leadership styles, organization and management, ethics and values clarification, goal setting, communication, career objectives, coaching burn-out and sport psychology. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.
Restriction: KIN department majors only.
Offered: spring.

PED 371 Assessment in Physical Education **3 Credits**
This course will introduce the teacher candidate to assessment and its role in the physical education profession. Topics include fitness testing, integrating physical education assessment tools, and basic statistics. In addition, there will be a focus on the evaluation of the New York State Standards, authentic assessments and SHAPE America guidelines.
Restriction: must be physical education or physical and health education major; permission of program director.
Offered: spring.

PED 372 Seminar in Kinesiology **3 Credits**
The course requires students to engage in professional writing; students will be taught how to conduct and write about a given topic. All course-content will be research-based, and students will be encouraged to see the connections between the research used throughout the class and the specific topic they are reviewing for the extended writing project.
Restriction: KIN department majors only.
Fulfills College Core: Advanced Writing-Intensive
Offered: spring.

PED 380 Concepts of Teaching Sport Skills **3 Credits**
The purpose of this course is to give each student an in depth exposure to and an understanding of the various motor learning principles and factors influencing the acquisition of motor skills. The central focus of the course will be directed to the learning process. Age appropriate activities and instructional guidelines will be examined. This includes the variables related to the learner, the skills to be acquired and the instructional procedures that can be used by the physical educator, coach or exercise specialist.
Restriction: must be physical education or physical and health education major.
Offered: spring.

PED 441 Teaching Methods in Physical Education **3 Credits**
Development, implementation and integration of a physical education program; teaching strategies for K-12 physical education with emphasis on New York and national learning standards in Physical Education.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Fulfills College Core: Oral Communication
Offered: fall.

PED 441L Teaching Practicum in Physical Education **0 Credits**
The teacher candidate will train for student teaching at the K-12 school level. To successfully complete this experience the candidate will finish a series of modules designed to bridge the gap between the college classroom and the teaching setting.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.

PED 493 Student Teaching Physical Education/Health: Childhood and Adolescence **12 Credits**
Two seven-week, full-time student teaching experiences with one placement in an elementary school (Grades 1-6) and the other placement in a high school (Grades 7-12) culminating in preparation for teacher certification. Grade: Pass/Fail. The combination of PED 493, EDU 495, EDU 496, EDU 497, and EDU 498 during the student teaching semester will count as a full semester of three courses, 15 credit hours.
Prerequisite: Completion of all other course requirements and department approval, and minimum GPA of 2.7 in all major courses. **Corequisite:** EDU 497 & EDU 498. **Restriction:** permission of program director.
Offered: fall & spring.

PED 499 Independent Study **1-3 Credits**
Independent study with a Kinesiology faculty member with emphasis on research in Physical Education. Independent studies require an application and approval of the associate dean.
Prerequisite: permission of instructor, department chair, & associate dean.
Offered: occasionally.

Special Education (SPE)

SPE 291 Nature and Needs of CH Students with Learning Disabilities **3 Credits**
Describes the effect of mild disabilities on childhood. Focuses on collaborative strategies for parental involvement. Highlights the CSE process, placement options and instructional strategies in grades one to six. Requires 20 hours field placement.
Prerequisite: SPE 341. **Corequisite:** SPE 292.

SPE 292 Remedial Strategies in the Childhood Content Areas **3 Credits**
Describes appropriate techniques and materials for instruction to students with disabilities and those at risk of failure. Emphasizes assistive technology for students in childhood classrooms across the curriculum.
Prerequisite: SPE 100. **Corequisite:** SPE 291.

SPE 311 Nature/Needs of Childhood Students with Intellectual Disabilities & Autism Spectrum Disorders **3 Credits**
Describes effects of MR and other developmental disabilities on childhood. Focuses on collaborative strategies for parental involvement. Highlights instructional strategies for grades 1-6 across the continuum of services. Requires 20 hours field placement.
Prerequisites: SPE 291 & SPE 292. **Corequisite:** EDU 356.
Offered: occasionally.

SPE 312 Multidisciplinary Assessment and Childhood Teaching **3 Credits**
Emphasizes a multidisciplinary approach to meet the assessment and learning needs of childhood students with disabilities. Explores assessment and evaluation using the New York State Standards for Severe Disabilities and the Alternative Performance Indicators.
Prerequisite: SPE 291 & SPE 292. **Corequisite:** SPE 311.

SPE 330 Nature/Needs of Childhood Students with Behavioral Disorders **3 Credits**
Describes the effect of Emotional and Behavioral Disorders on children and their families. Highlights NYSED Regulations, collaboration and instructional strategies to address academic and behavioral issues. Requires 20 hours of field placement.
Prerequisites: SPE 311 & EDU 356. **Corequisite:** ECCH 412.
Offered: occasionally.

SPE 335 Classroom Management in Childhood Classrooms **3 Credits**
Discusses implications of behavior management and importance of a proactive approach to prevent behavior problems. Emphasizes appropriate classroom structure, and individual and group contingencies to support children with E/BD in grades 1-6.
Prerequisite: SPE 311 & SPE 312. **Corequisite:** SPE 330.

SPE 341 Inclusive Strategies **3 Credits**
Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration.
Fulfills College Core: Diversity

SPE 432 Seminar in Teaching and Assessment **3 Credits**
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the special education-childhood level. Requires 50 hours of field placement.
Fulfills College Core: Oral Communication

SPE 493 Supervised Student Teaching **12 Credits**
Highlights knowledge, skills and dispositions of professional educators. One full-time 7-week placement in each childhood and special education-childhood classroom requires candidates to become the instructional reader under the supervision of cooperating teachers and college faculty.
Prerequisite: signature, minimum GPA of 2.70, minimum grade of C in each required education course, some schools may require certain health tests.
Corequisite: EDU 494 & EDU 497.
Offered: every spring.

SPE 495 Advanced Research Seminar in Autism **1-6 Credits**
Advanced Research Seminar in Autism provides students with advanced clinical and research training in autism spectrum disorder (ASD). The course consists of two distinct but interrelated components including (1) classroom instruction and applied training in evidence-based treatment for children with ASD and (2) hands-on research experience during studies being conducted. Students will learn about ASD and evidence-based treatments, and participate in various studies involving high-functioning youth with ASD. Students also serve as a member of a professional research team..

SPE 499 Independent Study **3 Credits**
Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Teaching English to Speakers of Other Languages (TESL)

TESL 281 Cultural Perspectives in Multilingual Education **3 Credits**
In this course, candidates examine the current debate regarding the role and definition of culture in the study of TESOL and the ESL classroom. Students will come to understand the effects of stereotyping the cultural characteristics of ESL students as well as the very real impact culture has on students' learning styles and classroom experiences. ESL 581 candidates will examine the potential impact their teaching strategies will have in the ESL classroom, with regard to understanding their own cultural characteristics and presuppositions. A balanced view of intercultural communication is the goal. The course includes fieldwork designed to investigate cultural differences (10-hours of fieldwork required).
Offered: every fall.

TESL 283 Linguistics, Literacy, & Second Language Acquisition **3 Credits**
This course will introduce the core disciplines of linguistics; this includes the scientific study of language components as they apply to all aspects of literacy learning (e.g., phonetics, phonology, morphology, syntax, and semantics). Candidates will consider how grammar is shaped by human cognition, culture, and speakers' communicative goals as well as how languages around the world construct words, figurative language, and sentences. In this course, language phenomenon, scientific bases, terminology on linguistics, multi-relational aspects and other related areas are discussed. Language phenomenon is discussed by reference to domains that nurture it. Language origins, language-brain relationship, sound, word, syntactic, meaning and social systems, communication with all its contexts, discourse analysis and its approaches, language learning and teaching aspects are all discussed throughout the course. Linguistics knowledge and language teaching methods are treated as integrated topics. Primary course goals are to provide candidates with the necessary information on language as a dynamic system, domains related to language, and creating an intellectual background for language and language teaching. An expected outgrowth of the study of linguistics is that students will realize the relationship between understanding specific structures in a language and effective language teaching. In addition, this course provides an up-to-date introduction to the study of linguistics, the discipline that investigates and describes language acquisition, production, and comprehension. The course will also examine English language structures--the language of the dominant society--and enhance language awareness. 20 hours of fieldwork are required for TESL 283/284.
Prerequisites: ECCH 221 and ECCH 222. **Corequisite:** TESL 284.
Restrictions: CH/TESOL majors only.
Offered: every spring.

TESL 284 Curriculum, Assessment, & Methods of Teaching Native Language Arts **3 Credits**
This course is an introduction to Native Language Arts (NLA) instruction for speakers of other languages. It is intended to provide models of instruction in the native language arts which are aligned with the New York State learning standards. Through reading, discussion, observation, and demonstration, candidates will come to understand the importance of native language literacy in the development of literacy in the second language. It has been found that there is a strong and positive correlation between literacy skills in the native language and literacy skills in the second language. Students with the highest levels of native language literacy are those who eventually become the strongest readers in the second language. Candidates will become familiar with approaches to teaching NLA in the 'Post-Method' Era. Candidates will be provided with experiences in teaching grammar, pronunciation, speaking, listening, vocabulary, reading and writing as well as experience a variety of methods to assess these components of Native Language Arts. As research has demonstrated, those skills and concepts learned in one language serve as a reference point for development of a second language. Therefore, a strong native language arts instructional program integrating learning experiences and standards will facilitate the transfer of literacy skills into English and will develop the ability to complete increasingly complex academic tasks. Field Experience: 20-hours of fieldwork required for TESL 283/284.
Corequisite: TESL 283. **Restrictions:** CH/TESOL majors only.
Offered: spring.

TESL 385 Methods and Materials: Teaching English to Speakers of Other Languages **3 Credits**
This course is an introduction to methods and materials for the teaching of English to speakers of other languages (TESOL). Through a program of lectures, readings, discussions, and practical teaching exercises in the field, candidates will explore the educational contexts in which English is taught and learned, methods and materials that teachers use to teach it, and the links between what teachers and learners do in the classroom and what applied linguistic research tells us about how second languages are learned. Satisfactory completion of the course indicates that candidates have acquired a basic knowledge of the methodology and materials of TESOL and basic skills in putting that knowledge into practice. There is a focus on core curricular areas, pedagogy, and materials for responsive instruction that utilizes research-tested approaches and instructional strategies that actively engage students in learning. More advanced study and supervised teaching practice will be acquired as candidates apply these skills in an ESL classroom during their supervised practicum. Field Experience: 20-hours of fieldwork required for TESL 385/387.
Corequisite: TESL 387.
Offered: every fall.

TESL 386 Methods of Teaching the Subject Areas in the Native Language **3 Credits**

This course is for elementary and secondary teachers who will be or are currently working with culturally and linguistically diverse students. It is intended to provide models of content area instruction in the native language, aligned with the New York State learning standards. Through reading, discussion, observation and demonstration, candidates will learn about teaching content across curricular subject areas as well as understand the importance of native language literacy in the development of literacy in the second language. The course explores English language development in the context of academic language socialization, specifically through the instruction of English along with the curricula of the content areas. There is a focus on core curricular areas, pedagogy, and materials for responsive instruction that utilizes research-tested approaches and instructional strategies that actively engage students in learning. It includes responsive instruction which is differentiated; it meets the needs of ALL learners including those who struggle, those in the middle, and those who are high achievers and need challenges. Field Experience: 20-hours of fieldwork required.
Corequisite: ECCH 412.
Offered: every spring.

TESL 387 Evaluation Assessment in Bilingual/TESOL Education **3 Credits**

In this course, candidates will examine assessment measures and evaluation protocols as well as methodologies for dynamic instruction (instruction that includes ongoing assessment in the process of teaching) with ESL/CLD learners. Current research and materials for TESOL instruction, assessment, and evaluation will be analyzed for validity, reliability, and utility. Various instructional models for dynamic instruction will also be explored for effectiveness. Dynamic teaching refers to teaching with ongoing assessment and immediate adjustment in instruction based on in-the-moment assessment that informs the teacher to remediate, go on, or challenge learners. Candidates will analyze the internal construction of testing instruments, procedures for alternative assessment of ESL/CLD students, and options for appropriately adapting tests that are part of classroom curriculum in ways that make them effective and equitable for ESL/CLD learners. Students will complete a field case study as part of this course. Field Experience: 20-hours of fieldwork required for TESL 385/387.
Corequisite: TESL 385.
Offered: every fall.

TESL 432 Seminar in Teaching and Assessment **3 Credits**

Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the special education-childhood level. Field Experience: 50 hours of fieldwork required.
Offered: every fall.

TESL 493 Student Teaching **12 Credits**

Highlights knowledge, skills and dispositions of professional educators. One full-time 7-week placement in each childhood and special education-childhood classroom requires candidates to become the instructional reader under the supervision of cooperating teachers and college faculty.
Prerequisite: Signature, minimum GPA of 2.70, minimum grade of C in each required education course, some schools may require certain health tests.
Corequisites: EDU 497 & EDU 498. **Restriction:** CH/TESOL majors only.
Offered: every spring.

Adolescence Education (BA)

Chair: Barbara A. Burns, PhD

Introduction

Professional sequences in Adolescence Education give teacher candidates a thorough foundation in the many facets of modern American secondary education and a gradually increasing exposure to the realities of the classroom. A broad range of field experiences, from observation and tutoring to a full semester of student teaching, is an essential part of the curriculum. Each program also includes an integrated sequence of subject-area courses offered by one or more of the academic departments at the college. The Adolescence Education program offers nine certification programs at the Adolescence Level — grades 7 through 12. A more detailed description of the program, faculty, facilities, academic and co-curricular opportunities can be found on the program webpage (https://www.canisius.edu/academics/programs/adolescence-education-undergraduate/).

Qualifications

Academic criteria for endorsement and completion of the program are as follows: Students must maintain a cumulative GPA of 2.7 or higher and a grade of C or higher in content and pedagogical courses. They must achieve satisfactory performance in field placements. All candidates must complete a minimum of 120 credit hours to graduate.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

In addition, candidates will be assigned an advisor in their respective concentration area.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in

some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

The Adolescence Education Major includes the following required courses and an academic concentration. Each of these courses require a grade of C or higher.

Code	Title	Credits
EDS 101	Human Growth and Social Development: Adolescence	3
EDS 223	Foundations of Adolescent Literacy	3
EDS 224	Adolescent Literacy in a New Literacies World	3
EDS 360	Evaluation and Teaching Strategies	3
EDS 390	Cognition, Learning and Assessment of Adolescence	3
Choose the appropriate course:		3
EDS 402	Methods of Teaching English: Adolescence	
EDS 403	Methods of Teaching Mathematics: Adolescence	
EDS 404	Methods of Teaching Modern Languages: Adolescence	
EDS 405	Methods of Teaching Science: Adolescence	
EDS 406	Methods of Teaching Social Studies: Adolescence	
Choose the appropriate course:		3
EDS 432	Applied Methods of Teaching English: Adolescence	
EDS 433	Applied Methods of Teaching Mathematics: Adolescence	
EDS 434	Applied Methods of Teaching Modern Languages: Adolescence	
EDS 435	Applied Methods of Teaching Science: Adolescence	
EDS 436	Applied Methods of Teaching Social Studies	
EDS 493	Supervised Student Teaching	12
EDU 123	Technology in Education 1 [1]	1
EDU 223	Technology in Education 2 [1]	1
EDU 323	Technology in Education 3 [1]	1
EDU 250	Foundations of Education	3
EDU 494	Capstone Seminar for Teacher Candidates	3
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3
SPE 341	Inclusive Strategies	3
Total Credits		48

[1] Candidates who are pursuing a concentration in Biology, Chemistry, or Physics are not required to take this class, although it is highly recommended.

Major Experiences

New York State requires the successful completion of at least 100 hours of field experience before student teaching. This requirement is divided up among three courses in the major program. EDU 250 has a 15 hour field experience, EDS 360 has a 30 hour field experience, EDS 402-EDS 406 (choose the appropriate course) has a 30 hour field experience, and EDS 432-EDS 436 (choose the appropriate course) hosts 50 hours. The field experience builds from participatory observation to tutoring or working with small groups to teaching a lesson and then teaching lessons from a learning segment designed by the candidate in the EDS 432-EDS 436 course.

Academic Concentration

Candidates choose from the following areas of certification: Biology, Chemistry, Physics, Mathematics, English, Social Studies, or Spanish. Required courses in these content areas are listed below:

Adolescence Biology Concentration

Code	Title	Credits
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II	4
BIO 408	Biotechnology, Theory in Practice [1]	3-4
or BIO 450	Molecular Biology	
BIO 404	Genetics [1]	3
Choose one of the following ecology courses [1]		3-4
BIO 320	Field Ecology	
BIO 375	Community Ecology	
BIO 377	Freshwater Biology	
Choose one of the following microbiology or physiology courses		4
BIO 305 & 305L	Medical Microbiology and its Ecological Basis and Medical Microbiology and its Ecological Basis Lab	
BIO 307 & 307L	Microbiology and Microbiology Laboratory	
BIO 340 & 340L	Physiology and Physiology Laboratory	
In addition to the required biology classes, students also must complete the following courses:		
MAT 111	Calculus I	4
MAT 131	Statistics for Social Sciences	3
or MAT 141	Inferential Statistics and Computers for Science	
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4

PHY 201 & 201L	College Physics I and College Physics I Laboratory	4
Total Credits		44-46

[1] Students must complete a total of 30 biology credits. To reach that total, students must complete one laboratory associated with one of the following classes: BIO 408, BIO 450, BIO 320, BIO 375, BIO 377, BIO 404

To Add Chemistry Certification to the Biology Certification, please add:

Code	Title	Credits
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
BCH 301 & 301L	Introduction to Biochemistry and Introduction to Biochemistry Laboratory	4
CHM 301	Fundamental Physical Chemistry	3
CHM 381	Scientific Literature and Communication	1
Total Credits		16

Adolescence Chemistry Concentration

Code	Title	Credits
CHM 104	Energy, Environment, and Society	3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
CHM 244	Inorganic Chemistry	3
CHM 301	Fundamental Physical Chemistry	3
BCH 301 & 301L	Introduction to Biochemistry and Introduction to Biochemistry Laboratory	4
Must take one of the following:		1
CHM 301L	Fundamental Physical Chemistry Laboratory	
CHM 381	Scientific Literature and Communication	
In addition to the chemistry courses for the concentration, students also must complete the following related courses:		
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
GEO 325	Introduction to Physical Geography	3
MAT 111	Calculus I [1]	4
One statistics class. Choose one of the following:		3-4
MAT 131	Statistics for Social Sciences	
MAT 141	Inferential Statistics and Computers for Science	
PHY 201 & 201L	College Physics I and College Physics I Laboratory	4
PHY 202 & 202L	College Physics II and College Physics II Laboratory	4
Total Credits		52-53

[1] Students placed in MAT 109 must also complete MAT 110. This sequence will replace MAT 111.

Adolescence Mathematics Concentration

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3
MAT 230	Logic, Set Theory, and Proofs	4
MAT 301	History of Mathematics	3
MAT 311	Abstract Algebra	4
MAT 331	Geometry	3
MAT 351	Probability & Statistics I	3
One Math (MAT) elective at the 200-level or higher [1]		3
One Computer Science (CSC) course		3
Total Credits		42

[1] Students may also use MAT 121, MAT 150, or MAT 191 to fulfill this requirement.

Please note that students pursuing the Mathematics Concentration are strongly encouraged to complete a dual major with Adolescence Education and Mathematics and Statistics. To complete the dual major, students must add MAT 321; the series of MAT 380, MAT 381, and MAT 480; and one of the following: MAT 312, MAT 322, or MAT 352.

Adolescence Physics Concentration

Code	Title	Credits
PHY 129	Introduction to Astronomy	3
or PHY 130	Introductory Geology	
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory	4
PHY 226 & 226L	Basic Electronics and Basic Electronics Laboratory	4
PHY 330	Electrodynamics I	3
PHY 332	Statistical and Thermal Physics	3
PHY 350	Modern Physics Laboratory	1
PHY 443	Classical Mechanics	3
PHY 449	Nuclear Physics Lab	1
PHY 498	Senior Project	1-3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
MAT 111	Calculus I	4
MAT 112	Calculus II	4

MAT 222	Differential Equations	3
Total Credits		50-52

Adolescence English Concentration

Code	Title	Credits
ENG 299	Introduction to English Studies	3
One course in Women's Literature		3
One course in Multicultural Literature		3
One course in Global Literature		3
One course in Writing (300 level or Creative Writing)		3
ENG 322	Shakespeare I	3
or ENG 323	Shakespeare II	
One Pre-1800 British Literature course		3
One Post-1900 American Literature Course		3
One Pre-1900 American Literature course		3
EDS 370	Teaching Young Adolescent Literature	3
EDU 410	Teaching Writing in the Schools	3
Total Credits		33

Adolescence Social Studies Concentration

Code	Title	Credits
HIS 107	History of Modern Europe to 1815 (European History)	3
or HIS 212	Men and Ideas in History	
HIS 108	History of Modern Europe since 1815 (European History)	3
or HIS 211	Women In The Western World	
HIS 123 & HIS 124	History of the United States: The Colonial Period to Reconstruction and History of the United States: 1877 to the Present (American History)	6
HIS 300	Historical Geography (World History)	3
ECO 101 & ECO 102	Principles of Macroeconomics and Principles of Microeconomics (Economics)	6
PSC 103	The American Constitution (Political Science)	3
or PSC 104	American Political Process	
PSC 140	International Relations (Political Science)	3
or PSC 150	Comparative Government and Politics	
One Culture Class (see department for current list of courses that fulfill this requirement)		3
Total Credits		30

Please note that students pursuing the Social Studies Concentration are strongly encouraged to complete a dual major with Adolescence Education and History. To complete the dual major, students must add the following courses: HIS 382; one of HIS 211, HIS 213, or HIS 230; one of HIS 110, HIS 131, or HIS 132; and one elective at the 300-level.

Adolescence Spanish Concentration

Code	Title	Credits
SPA 215	Intermediate Spanish [1]	3
SPA 217	Introduction to Spanish Composition [1]	3
SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3
Five Spanish electives		15
Total Credits		30

[1] Students who begin study at the 300-level will have the 200-level courses waived, but still need 10 courses for the concentration.

Middle School Extension

Candidates wishing to obtain an extension to teach grades 5-6 in their area of concentration must take EMC 352 and EMC 391 in addition to the courses listed above.

Freshman	
Fall	**Spring**
EDU 100 (Not required but strongly recommended)(Fall Only)	EDU 250
EDS 101	EDU 495 (co-requisite with 250)
EDU 123 (May be taken Fall or Spring)	EDU 496 (co-requisite with 250)
	EDU 123 (May be taken Fall or Spring)
Sophomore	
Fall	**Spring**
EDS 223 (20 hours field experience)	EDS 224 (Spring Only)
SPE 341	EDU 223 (May be taken Fall or Spring)
EDU 223 (may be taken Fall or Spring)	EMC 352 (Optional - needed for middle childhood extension)(Spring Only)
Junior	
Fall	**Spring**
EDS 360 (Fall Only)	EDS 402, 403, 404, 405, or 406 (Methods Class) (Spring Only)[1]
EDS 390	EDU 323 (May be taken Fall or Spring)
EDU 323 (may be taken Fall or Spring)	
EMC 391 (Optional - needed for middle childhood extension) (Fall Only)	
Senior	
Fall	**Spring**
EDS 432, 432, 433, 434, 435, or 436 (Fall Only)	EDS 493
EDU 494	EDU 497 (co-requisite 493)
	EDU 498

[1] Choose course based on appropriate concentration.

Learning Goals & Objectives

Learning Goal 1 (KNOWLEDGE – Observed in Writing)
Candidates in the Teacher Education programs will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Teacher candidates will:

- Acquire knowledge of each student, and demonstrate knowledge of student development and learning to promote achievement for all students.
- Know the content they are responsible for teaching, and the pedagogical content knowledge to plan instruction that ensures growth and achievement for all students.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)
Candidates in the Teacher Education programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Teacher candidates will:

- Demonstrate professional dispositions and implement instruction that engages and challenges all students to meet or exceed the learning standards.

Learning Goal 3 (SERVICE)
Candidates in the Teacher Education programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Teacher candidates will:

- Work with all students to create a dynamic learning environment that supports achievement and growth.
- Use multiple measures to assess and document student growth, evaluate instructional effectiveness, and modify instruction for diverse learners.

Learning Goal 4 (PROFESSIONALISM)
Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Teacher candidates will:

- Set informed goals and strive for continuous professional growth.

Learning Goal 5 (LEADERSHIP)
Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Teacher candidates will:

- Demonstrate professional responsibility and engage relevant stakeholders to maximize impact on student growth, development, and learning.

Childhood 1-6/TESOL K-12 (BS)

Chair: Barbara A. Burns, PhD

Introduction

This major prepares candidates in Childhood Education which covers Grades 1-6 and Teaching English to Speakers of Other Languages (TESOL) for Grades 1-6. It contains pedagogical knowledge and skills to ensure that candidates are qualified to teach at these levels and in high needs classroom settings serving students who are new Americans or who speak a language other than English at home. Many courses are infused with field experiences so candidates build skill as they progress through the program. In addition, each candidate must take coursework as set forth in the Canisius College Core Curriculum and must also choose a 30 credit liberal arts concentration to ensure that they have the content knowledge necessary to teach children in Grades 1-6.

Qualifications

Students must meet the requirements at all transition points in order to graduate with an education degree and be recommended for teacher certification. Please see School of Education and Human Services website for transition point requirements.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please

note that students will receive only one degree, regardless of the number of majors they complete.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
ECCH 221	Emergent Literacy	3
ECCH 222	Literacy and the Arts in the Elementary Classroom	3
ECCH 412	Managing the Early Childhood and Elementary Classroom	3
EDE 100	Human Growth and Development - Birth through Childhood	3
EDE 390	Cognition, Learning and Assessment - Birth through Childhood	3
EDU 100	Exploring the Teaching Profession	3
EDU 123	Technology in Education 1	1
EDU 223	Technology in Education 2	1
EDU 323	Technology in Education 3	1
EDU 250	Foundations of Education	3
EDU 272	Teaching Social Studies Integrating English Language Arts	3
EDU 428	Teaching Math & Science: Supporting STEM Education	3
EDU 494	Capstone Seminar for Teacher Candidates	3
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3
SPE 341	Inclusive Strategies	3
TESL 283	Linguistics, Literacy, & Second Language Acquisition	3
TESL 284	Curriculum, Assessment, & Methods of Teaching Native Language Arts	3
TESL 385	Methods and Materials: Teaching English to Speakers of Other Languages	3
TESL 386	Methods of Teaching the Subject Areas in the Native Language	3
TESL 387	Evaluation Assessment in Bilingual/TESOL Education	3
TESL 432	Seminar in Teaching and Assessment	3
TESL 493	Student Teaching	12
Total Credits		69

Optional Extensions to Teach at Additional Grade Levels

Middle Childhood Extension

Candidates wishing to obtain an extension to teach grades 7-9 in their area of concentration (English, Mathematics, Social Studies, or Spanish) must take EMC 352 and EMC 391 in addition to the courses listed.

Early Childhood Extension

Candidates wishing to obtain a certification to teach grades B-2 are advised to take two early childhood courses that focus on learning and development and methods of instruction in addition to the courses listed, and apply for an individual evaluation of credentials through NYSED or the BOCES Regional Certification Office. Courses that students have taken in the past include EDY 208 and EDY 209 .

Additional Curriculum Requirements

Childhood majors need to choose one of the following academic concentrations: English, Mathematics, Music, Science, Social Studies, Social Justice, French, or Spanish.

English Concentration

Code	Title	Credits
ENG 111	Academic Writing	3
ENG 112	Writing about Literature	3
ENG 299	Introduction to English Studies [1]	3
Two 200-level literature courses		6
One pre-1900 American Literature course [2]		3
One pre-1800 British Literature course [3]		3
One Shakespeare course [4]		3
Two writing courses [5]		6
Total Credits		30

1. Must take at least one 200-level literature course before taking ENG 299.
2. Choose from ENG 315, ENG 316, ENG 319, or ENG 396 (if the topic is American Literature)
3. Choose from ENG 233, ENG 301, ENG 305, ENG 306, ENG 332, ENG 347, ENG 370, or ENG 373.
4. Choose from ENG 322 and ENG 323.
5. Choose from EDU 410, ENG 205, ENG 294, ENG 383, ENG 385, ENG 388, ENG 389, ENG 391, ENG 392, ENG 393, ENG 411, or ENG 490.

Mathematics Concentration

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 219	Linear Algebra	4
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 331	Geometry	3
MAT 351	Probability & Statistics I	3
Choose one of the following:		3-4
MAT 211	Calculus III	

Computer Science elective		
Choose one of the following:		3-4
MAT 222	Differential Equations	
Math elective		
Total Credits		32-34

Music Concentration

Code	Title	Credits
FAM 115	Fundamentals of Music	3
FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230 & 230L	Music Theory I and Music Theory I Lab	4
FAM 240 & 240L	Music Theory II and Music Theory II Lab	4
FAM 330 & 330L	Music Theory III and Music Theory III Lab	4
One Music Literature I course [1]		3
One Music Literature II course [2]		3
One Music elective [3]		3
Total Credits		30

1 Choose from FAM 216, FAM 217, FAM 218, FAM 219, or FAM 220.

2 Choose from FAM 123, FAM 124, or FAM 224.

3 Choose any 3-credit course with an FAM prefix.

Science Concentration

Code	Title	Credits
GEO 325	Introduction to Physical Geography	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
One physics course		3
Two science electives [1]		6
Total Credits		32

1 Choose any 2 courses with a BCH, BIO, CHM, or PHY prefix.

Social Studies Concentration

Code	Title	Credits
ECO 101	Principles of Macroeconomics	3
GEO 325	Introduction to Physical Geography	3
PSC 104	American Political Process	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3
HIS 124	History of the United States: 1877 to the Present	3
HIS 254	First Peoples	3
One European or Asian/African/Latin American History elective		3
Total Credits		30

Note: HIS 382 is highly recommended for students intending to teach in New York State.

Social Justice Concentration

Code	Title	Credits
Foundations Course		3
SOC 273	Social Movements and Social Change	
Research Courses (select two of the following)		6
ANT 351	Qualitative Research Methods	
HSV 303	Research Methods in the Social Sciences	
SOC 342	Social Research Methods	
Skills Classes (select two of the following)		6
COM 201	Oral Communication	
COM 204	Interpersonal Communication	
COM 302	Small Group Communication	
ECO 311	Metropolitan Economic Development and GIS	
PSC 237	State and Local Politics	
PSY 329	Leadership and Motivation	
Four Electives (from your focus: Local/Urban or Global)		12
Local (Urban) Focus Electives [1]		
HIS 382	New York State History	
HSV 300	Social and Cultural Diversity	
HSV 301 or SOC 111	Social Policies Contemporary Social Problems	
HSV 302	Children, Schools, and the Community	
PSC 237	State and Local Politics	
SOC 340	Sociology of the City	
Global Focus Electives [1]		
ANT 122	Sociocultural Anthropology	
HIS 211	Women In The Western World	
HIS 358	Traditional Japan	
HIS 394	Modern Middle East	
PSC 241	Human Rights and Globalization	
HSV 300	Social and Cultural Diversity	
HSV 302	Children, Schools, and the Community	
Elective		3
One course from the other focus (either Local or Global)		
Total Credits		30

1 The list of courses provided here only includes active courses at the time this catalog was prepared. Additional classes that are added by other departments might also be used to satisfy this requirement. If you think a class should count, please contact the chair of the Teacher Education Department.

French Concentration

Students will not be accepted into this concentration after January 29, 2018

Code	Title	Credits
FRC 215	Intermediate French	3
FRC 217	Intermediate French II	3
FRC 323	Topics in Conversation I	3
FRC 324	French Composition through Literature	3
FRC 332	Substance and Style: Effective Writing in French	3
Five French electives		15
Total Credits		30

Spanish Concentration

Code	Title	Credits
SPA 215	Intermediate Spanish [1]	3
SPA 217	Introduction to Spanish Composition [1]	3
SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3
Five Advanced-Level Spanish Classes (any SPA class at 300 or 400 level)		15
Total Credits		30

[1] Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students still will take 10 courses for the concentration.

Please note that this curriculum changed for students who matriculated in fall 2017 or later. Earlier students should consult their original catalog year.

Roadmap

Freshman

Fall	Spring
EDE 100	ECCH 221
EDU 100	SPE 341
EDU 123	EDY 208 (Optional - may be used to apply to NYSED or BOCES for early childhood certification)

Sophomore

Fall	Spring
EDU 250	TESL 283
EDU 495	TESL 284
EDU 496	EDU 272
ECCH 222	
EDU 223	
EDY 209 (Optional - may be used to apply to NYSED or BOCES for early childhood certification)	
EMC 391 (Optional - needed for middle childhood extension)	

Junior

Fall	Spring
TESL 385	TESL 386
TESL 387	ECCH 412
EDU 323	EMC 352 (Optional - needed for middle childhood extension)
EDE 390	

Senior

Fall	Spring
TESL 432	TESL 493
EDU 428	EDU 497
EDU 494	EDU 498

Learning Goals & Objectives

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Teacher Education programs will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Teacher candidates will:

- Acquire knowledge of each student, and demonstrate knowledge of student development and learning to promote achievement for all students.
- Know the content they are responsible for teaching, and the pedagogical content knowledge to plan instruction that ensures growth and achievement for all students.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Teacher Education programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Teacher candidates will:

- Demonstrate professional dispositions and implement instruction that engages and challenges all students to meet or exceed the learning standards.

Learning Goal 3 (SERVICE)

Candidates in the Teacher Education programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Teacher candidates will:

- Work with all students to create a dynamic learning environment that supports achievement and growth.
- Use multiple measures to assess and document student growth, evaluate instructional effectiveness, and modify instruction for diverse learners.

Learning Goal 4 (PROFESSIONALISM) Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Teacher candidates will:

- Set informed goals and strive for continuous professional growth.

Learning Goal 5 (LEADERSHIP) Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Teacher candidates will:

- Demonstrate professional responsibility and engage relevant stakeholders to maximize impact on student growth, development, and learning.

Courses

Please note that Students in TESOL also take courses in Teacher Education and Childhood Education. A full list of courses in all Education subjects is available on the Educator Preparation page. (p. 297)

TESL 281 Cultural Perspectives in Multilingual Education **3 Credits**
In this course, candidates examine the current debate regarding the role and definition of culture in the study of TESOL and the ESL classroom. Students will come to understand the effects of stereotyping the cultural characteristics of ESL students as well as the very real impact culture has on students' learning styles and classroom experiences. ESL 581 candidates will examine the potential impact their teaching strategies will have in the ESL classroom, with regard to understanding their own cultural characteristics and presuppositions. A balanced view of intercultural communication is the goal. The course includes fieldwork designed to investigate cultural differences (10-hours of fieldwork required).
Offered: every fall.

TESL 283 Linguistics, Literacy, & Second Language Acquisition **3 Credits**
This course will introduce the core disciplines of linguistics; this includes the scientific study of language components as they apply to all aspects of literacy learning (e.g., phonetics, phonology, morphology, syntax, and semantics). Candidates will consider how grammar is shaped by human cognition, culture, and speakers' communicative goals as well as how languages around the world construct words, figurative language, and sentences. In this course, language phenomenon, scientific bases, terminology on linguistics, multi-relational aspects and other related areas are discussed. Language phenomenon is discussed by reference to domains that nurture it. Language origins, language-brain relationship, sound, word, syntactic, meaning and social systems, communication with all its contexts, discourse analysis and its approaches, language learning and teaching aspects are all discussed throughout the course. Linguistics knowledge and language teaching methods are treated as integrated topics. Primary course goals are to provide candidates with the necessary information on language as a dynamic system, domains related to language, and creating an intellectual background for language and language teaching. An expected outgrowth of the study of linguistics is that students will realize the relationship between understanding specific structures in a language and effective language teaching. In addition, this course provides an up-to-date introduction to the study of linguistics, the discipline that investigates and describes language acquisition, production, and comprehension. The course will also examine English language structures--the language of the dominant society--and enhance language awareness. 20 hours of fieldwork are required for TESL 283/284.
Prerequisites: ECCH 221 and ECCH 222. **Corequisite:** TESL 284.
Restrictions: CH/TESOL majors only.
Offered: every spring.

TESL 284 Curriculum, Assessment, & Methods of Teaching Native Language Arts **3 Credits**
This course is an introduction to Native Language Arts (NLA) instruction for speakers of other languages. It is intended to provide models of instruction in the native language arts which are aligned with the New York State learning standards. Through reading, discussion, observation, and demonstration, candidates will come to understand the importance of native language literacy in the development of literacy in the second language. It has been found that there is a strong and positive correlation between literacy skills in the native language and literacy skills in the second language. Students with the highest levels of native language literacy are those who eventually become the strongest readers in the second language. Candidates will become familiar with approaches to teaching NLA in the 'Post-Method' Era. Candidates will be provided with experiences in teaching grammar, pronunciation, speaking, listening, vocabulary, reading and writing as well as experience a variety of methods to assess these components of Native Language Arts. As research has demonstrated, those skills and concepts learned in one language serve as a reference point for development of a second language. Therefore, a strong native language arts instructional program integrating learning experiences and standards will facilitate the transfer of literacy skills into English and will develop the ability to complete increasingly complex academic tasks. Field Experience: 20-hours of fieldwork required for TESL 283/284.
Corequisite: TESL 283. **Restrictions:** CH/TESOL majors only.
Offered: spring.

TESL 385 Methods and Materials: Teaching English to Speakers of Other Languages **3 Credits**
This course is an introduction to methods and materials for the teaching of English to speakers of other languages (TESOL). Through a program of lectures, readings, discussions, and practical teaching exercises in the field, candidates will explore the educational contexts in which English is taught and learned, methods and materials that teachers use to teach it, and the links between what teachers and learners do in the classroom and what applied linguistic research tells us about how second languages are learned. Satisfactory completion of the course indicates that candidates have acquired a basic knowledge of the methodology and materials of TESOL and basic skills in putting that knowledge into practice. There is a focus on core curricular areas, pedagogy, and materials for responsive instruction that utilizes research-tested approaches and instructional strategies that actively engage students in learning. More advanced study and supervised teaching practice will be acquired as candidates apply these skills in an ESL classroom during their supervised practicum. Field Experience: 20-hours of fieldwork required for TESL 385/387.
Corequisite: TESL 387.
Offered: every fall.

TESL 386 Methods of Teaching the Subject Areas in the Native Language **3 Credits**
This course is for elementary and secondary teachers who will be or are currently working with culturally and linguistically diverse students. It is intended to provide models of content area instruction in the native language, aligned with the New York State learning standards. Through reading, discussion, observation and demonstration, candidates will learn about teaching content across curricular subject areas as well as understand the importance of native language literacy in the development of literacy in the second language. The course explores English language development in the context of academic language socialization, specifically through the instruction of English along with the curricula of the content areas. There is a focus on core curricular areas, pedagogy, and materials for responsive instruction that utilizes research-tested approaches and instructional strategies that actively engage students in learning. It includes responsive instruction which is differentiated; it meets the needs of ALL learners including those who struggle, those in the middle, and those who are high achievers and need challenges. Field Experience: 20-hours of fieldwork required.
Corequisite: ECCH 412.
Offered: every spring.

TESL 387 Evaluation Assessment in Bilingual/TESOL Education **3 Credits**
In this course, candidates will examine assessment measures and evaluation protocols as well as methodologies for dynamic instruction (instruction that includes ongoing assessment in the process of teaching) with ESL/CLD learners. Current research and materials for TESOL instruction, assessment, and evaluation will be analyzed for validity, reliability, and utility. Various instructional models for dynamic instruction will also be explored for effectiveness. Dynamic teaching refers to teaching with ongoing assessment and immediate adjustment in instruction based on in-the-moment assessment that informs the teacher to remediate, go on, or challenge learners. Candidates will analyze the internal construction of testing instruments, procedures for alternative assessment of ESL/CLD students, and options for appropriately adapting tests that are part of classroom curriculum in ways that make them effective and equitable for ESL/CLD learners. Students will complete a field case study as part of this course. Field Experience: 20-hours of fieldwork required for TESL 385/387.
Corequisite: TESL 385.
Offered: every fall.

TESL 432 Seminar in Teaching and Assessment **3 Credits**
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the special education-childhood level. Field Experience: 50 hours of fieldwork required.
Offered: every fall.

TESL 493 Student Teaching **12 Credits**
Highlights knowledge, skills and dispositions of professional educators. One full-time 7-week placement in each childhood and special education-childhood classroom requires candidates to become the instructional reader under the supervision of cooperating teachers and college faculty.
Prerequisite: Signature, minimum GPA of 2.70, minimum grade of C in each required education course, some schools may require certain health tests.
Corequisites: EDU 497 & EDU 498. **Restriction:** CH/TESOL majors only.
Offered: every spring.

Physical Education (BS)

Co-Chairs: Nicholas Lorgnier and Shawn O'Rourke
Director: Clancy M. Seymour, Ed.D.

Introduction

The Physical Education Teacher Education (PETE) program leads to New York State certification in physical education (K-12). The department recommends that candidates interested in teaching obtain dual certification in physical and health education (PEHL), but this major may be of interest for candidates only interested in teaching physical education. Teacher candidates interested in this single certification program should meet with the program director to discuss further. More information can be found at the program webpage (https://www.canisius.edu/academics/programs/physical-education-health/).

Teacher Certification Options

The teacher preparation program strives to develop a well-rounded professional who has special knowledge and skills in the areas of movement and sport and their interrelated disciplines. Major emphasis is placed on the development of educational and performance foundations which will prepare an individual to teach in kindergarten through grade 12 or to pursue professional growth through further study and/or graduate work.

Candidates enjoy a continuous and extensive program of clinical and laboratory experiences at the college and through our collaboration with our professional development schools which provide opportunities for in-school observations, micro-teaching, tutoring, and large-group instruction. These experiences help to insure that the program remains responsive to the needs of the candidates, students and the profession. This program of instruction incorporates the standards established for physical education at the local school district level, the New York State learning standards for physical education, and the guidelines set forth by the Society of Health and Physical Educators (SHAPE) America. The teacher certification option culminates with a semester long student-teaching experience in the K-12 schools. Each teacher candidate is given the opportunity to experience the privileges and responsibilities of a full-time teacher on both the elementary and secondary levels. An individual choosing to graduate without completing student teaching must fulfill this credit requirement in consultation with his/her advisor.

Qualifications

Academic Criteria for Endorsement and Completion of Program:

- Cumulative GPA of 2.7 or higher-Grade of C or higher in major courses
- Satisfactory performance in field placements
- Satisfactory completion of all program common assignments including submission on TaskStream

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Curriculum

An Ignatian Foundation

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Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
EDU 100	Exploring the Teaching Profession	3
EDU 123	Technology in Education 1	1
EDU 223	Technology in Education 2	1
EDU 323	Technology in Education 3	1
EDU 250	Foundations of Education	3
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3
PED 203	Lifetime and Fitness Activities	3
PED 204	Games and Sports	3
PED 207	Individual Performance and Dance Activities	3
PED 305	Outdoor Curriculum and Cooperative Activities	3
PED 306	Early Field Experience Elementary Physical Education	0
PED 307	Early Field Experience Secondary Physical Education	0
PED 311	Movement Education and Elementary Activities	3
PED 351	Coaching Theory and Techniques	3
PED 354	Adapted Physical Education	3
PED 360	Human Growth and Motor Development	3
PED 371	Assessment in Physical Education	3
PED 372	Seminar in Kinesiology	3
PED 380	Concepts of Teaching Sport Skills	3
PED 441	Teaching Methods in Physical Education	3
PED 441L	Teaching Practicum in Physical Education	0
PED 493	Student Teaching Physical Education/Health: Childhood and Adolescence	12
BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
HED 205	Wellness and Fitness	3
HED 337	Exercise Principles and Applications	3
HED 361	Psychology of Sport and Mental Health	3
KIN 235	Kinesiology	3
KIN 494	Capstone in Kinesiology	3
SPE 341	Inclusive Strategies	3
Total Credits		86

Major Electives

PETE majors should consult their advisor for major electives.

Major Experiences

All students in the PETE program must meet and continue to meet the professional standards of the program. No one who jeopardizes the health or well-being of a student, classmate or him or herself will continue as a student in the program. All students must possess the necessary physical attributes and exhibit qualities of good judgment and emotional stability. The PETE program reserves the right to limit attire and adornments (such as clothing, jewelry, piercing, tattooing) of the body, hands, face, and oral cavity. The program assessment handbook outlines the enforcement of this policy. In all cases, the final appeal may be made to the Program Director/Department of Kinesiology chair.

Additional Considerations and Requirements

All PETE field experiences (early field, practicum, and student-teaching) are in the local Western New York area and transportation is required. Out-of-area field experiences must be approved by the Program Director and include an additional fee for each placement. PED 306 and PED 307 require 30 hour field experiences in a K-12 physical education setting. PED 441

Lab must be taken in the last semester before student teaching. Proof of professional association membership and current Lifeguarding/CPR/AED certifications must be provided prior to student-teaching. While foreign language is not required for graduation, secondary language proficiency must be demonstrated for New York State licensure. PETE majors should consult their advisor for additional course considerations.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
BIO 114 & 114L	BIO 115 & 115L
EDU 100	EDU 123
FYS 101	ENG 101
Field 3 or Field 7	Field 3
PED 204 or 305	Field 7
	PED 203 or 207
Sophomore	
Fall	**Spring**
HED 361	EDU 250 (Co-Req EDU 495/496)
HED 205 (or Field 4)	HED 205 (o Field 4)
KIN 235	PED 203 or 207
PED 204 or 305	PED 306 (30hrs Elementary PE)
PED 203 or 207	PED 311
RST 101 or PHI 101	RST 101 or PHI 101
Junior	
Fall	**Spring**
Field 1 or 2 (Ethics)	EDU 323
EDU 223	Field 1 or 2 (Ethics)
HED 337	PED 307 (30hrs Secondary PE)
PED 351	PED 371
SPE 341	PED 372
Elective (if necessary)	PED 380
	Elective (if necessary)
Senior	
Fall	**Spring**
KIN 494	PED 493
PED 354	EDU 497
PED 360	EDU 498
PED 441	
PED 441L (200hrs W/R/F weekly)[1]	
Elective (if necessary)	

[1] Valid Professional Membership/LG/CPR/AED

Learning Goals & Objectives

Learning Goal 1 (KNOWLEDGE – OBSERVED IN WRITING)

Candidates in the Physical Education program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Know and apply discipline-specific scientific and theoretical concepts critical to the development of a physically educated person

Learning Goal 2 (KNOWLEDGE – OBSERVED SKILLS AND DISPOSITIONS)

Candidates in the Physical Education program will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Demonstrate that they are physically educated individuals with the knowledge and skills necessary to demonstrate competent movement performance and health-enhancing fitness
- Implement developmentally appropriate learning experiences aligned with local, state, and national standards to address the diverse needs of all students.
- Use effective communication and pedagogical skills and strategies to enhance student engagement and learning.
- Utilize assessments and reflection to foster student learning and inform instructional decisions.

Learning Goal 3 (SERVICE)

Candidates in the Physical Education program will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Learning Goal 5 (LEADERSHIP)
Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Minors

Coaching Minor (p. 321)

The Coaching Minor is a common minor for many physical education students. The courses in the minor can be attached to any major. Completion of the minor often leads to graduate work at the master's degree level in Coaching Science. The courses can also lead to NY State certification. The minor focuses upon the principles of effective coaching including the role of the coach, practice planning, leadership styles, organization and management, ethics and values clarification, goal setting, communication, career objectives, coaching burn-out and sport psychology. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship. Some kinesiology courses have specific prerequisites, which are stated in the course descriptions.

Strength and Conditioning Minor (p. 331)

Courses

PED 203 Lifetime and Fitness Activities **3 Credits**

A content-focused physical education course that includes an emphasis on sport and fitness being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports, it also serves to expose students to other cultures that participate in these lifetime activities. Improving or maintaining fitness will be the focus of this class and might include activities like, but not limited to yoga, pilates, resistance training, spinning, running, fitness walking, fitness swimming, water polo, kickboxing, cardio-kick, zumba and exergaming. A 4-5 week unit on aquatics will also be included in this course. The course also provides coinciding opportunities to gain awareness of cultural variations and regional circumstances, through the lens of a particular sport. Students will be required to demonstrate movement competence in various sports and activities.

Fulfills College Core: Global Awareness

Offered: spring of odd-numbered years.

PED 204 Games and Sports **3 Credits**

A content-focused physical education course that includes an emphasis on sport being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports, it also serves to expose students to other cultures that participate in these activities. This includes the games categories of invasion, net/wall, target and fielding/striking. It also provides coinciding opportunities to gain awareness of cultures, and communities, and societies, through the lens of a particular sport. Students will be required to demonstrate movement competence in various games categories (invasion, net and target, etc.).

Fulfills College Core: Global Awareness

Offered: fall of odd-numbered years.

PED 207 Individual Performance and Dance Activities **3 Credits**

Students will learn appropriate organization and teaching progressions for various forms of individual-performance and dance activities taught in the P-12 curricula. Might include, but are not limited to gymnastics, figure skating, track and field, multi-sport events, in-line skating, wrestling, self-defense and skateboarding. Dance or rhythms activities that may focus on, but not limited to dance forms such as creative movement and dance, ballet, modern, ethnic/folk, hip hop, Latin, line, ballroom, social and square.

Offered: spring of even-numbered years.

PED 305 Outdoor Curriculum and Cooperative Activities **3 Credits**

Philosophy, teaching methods, programming and safety management. Activities may include initiatives, new games, problem solving, trust activities, ropes course, cycling, mountain biking, rock climbing, rappelling, cross-country skiing and others.

Offered: fall of even-numbered years.

PED 306 Early Field Experience Elementary Physical Education **0 Credits**

The teacher candidate will participate in K-6 elementary physical education. To successfully complete this experience the candidate will complete a 30 hour placement with an assigned local physical educator.

Prerequisite: signature of program director. **Restriction:** permission of program director.

Offered: fall & spring.

PED 307 Early Field Experience Secondary Physical Education **0 Credits**

The teacher candidate will participate in 7-12 secondary physical education. To successfully complete this experience the candidate will complete a 30 hour placement with an assigned local physical educator.

Prerequisite: signature of program director. **Restriction:** permission of program director.

Offered: fall & spring.

PED 311 Movement Education and Elementary Activities **3 Credits**

Conceptual bases, perceptual-motor development and practical applications of movement education. Development, implementation and integration of a physical education program; teaching strategies geared to the elementary level classroom with emphasis on New York and national learning standards in Physical Education. Field experience required.

Restriction: must be physical education or physical and health education major.

Offered: spring.

PED 351 Coaching Theory and Techniques **3 Credits**

Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children and young adults. Many participate at the 'house' league level, while others are involved with more competitive and elite programs. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, ethics and values clarification. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.

Offered: fall.

PED 354 Adapted Physical Education **3 Credits**
Designed to provide students with an exposure to education, physical education, sport and recreational programming for children with disabilities. Content focuses on variety of disabilities eligible for service under the Individuals with Disabilities Act (IDEA) and the ability to design, conduct, and assess a physical education program that is appropriate for this population. Service-Learning required.
Restriction: must be physical education or physical and health education major.
Fulfills College Core: Diversity
Offered: fall.

PED 360 Human Growth and Motor Development **3 Credits**
Examination of principles of growth and developmental theory with an emphasis on factors affecting changes in movement potential of individuals.
Restriction: must be physical education or physical and health education major.
Offered: fall.

PED 365 Principles and Philosophy of Coaching **3 Credits**
Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children, young adults and students. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, practice planning, leadership styles, organization and management, ethics and values clarification, goal setting, communication, career objectives, coaching burn-out and sport psychology. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.
Restriction: KIN department majors only.
Offered: spring.

PED 371 Assessment in Physical Education **3 Credits**
This course will introduce the teacher candidate to assessment and its role in the physical education profession. Topics include fitness testing, integrating physical education assessment tools, and basic statistics. In addition, there will be a focus on the evaluation of the New York State Standards, authentic assessments and SHAPE America guidelines.
Restriction: must be physical education or physical and health education major; permission of program director.
Offered: spring.

PED 372 Seminar in Kinesiology **3 Credits**
The course requires students to engage in professional writing; students will be taught how to conduct and write about a given topic. All course-content will be research-based, and students will be encouraged to see the connections between the research used throughout the class and the specific topic they are reviewing for the extended writing project.
Restriction: KIN department majors only.
Fulfills College Core: Advanced Writing-Intensive
Offered: spring.

PED 380 Concepts of Teaching Sport Skills **3 Credits**
The purpose of this course is to give each student an in depth exposure to and an understanding of the various motor learning principles and factors influencing the acquisition of motor skills. The central focus of the course will be directed to the learning process. Age appropriate activities and instructional guidelines will be examined. This includes the variables related to the learner, the skills to be acquired and the instructional procedures that can be used by the physical educator, coach or exercise specialist.
Restriction: must be physical education or physical and health education major.
Offered: spring.

PED 441 Teaching Methods in Physical Education **3 Credits**
Development, implementation and integration of a physical education program; teaching strategies for K-12 physical education with emphasis on New York and national learning standards in Physical Education.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Fulfills College Core: Oral Communication
Offered: fall.

PED 441L Teaching Practicum in Physical Education **0 Credits**
The teacher candidate will train for student teaching at the K-12 school level. To successfully complete this experience the candidate will finish a series of modules designed to bridge the gap between the college classroom and the teaching setting.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.

PED 493 Student Teaching Physical Education/Health: Childhood and Adolescence **12 Credits**
Two seven-week, full-time student teaching experiences with one placement in an elementary school (Grades 1-6) and the other placement in a high school (Grades 7-12) culminating in preparation for teacher certification. Grade: Pass/Fail. The combination of PED 493, EDU 495, EDU 496, EDU 497, and EDU 498 during the student teaching semester will count as a full semester of three courses, 15 credit hours.
Prerequisite: Completion of all other course requirements and department approval, and minimum GPA of 2.7 in all major courses. **Corequisite:** EDU 497 & EDU 498. **Restriction:** permission of program director.
Offered: fall & spring.

Physical Education/Health Education (BS)

Co-Chairs: Nicholas Lorgnier and Shawn O'Rourke
Director: Clancy M. Seymour, Ed.D.

Introduction

The Physical and Health Education Teacher Education (P/HETE) program strives to develop a well-rounded professional who has special knowledge and skills in the areas of movement and sport and their interrelated disciplines. Major emphasis is placed on the development of educational and performance foundations which will prepare an individual to teach in kindergarten through grade 12 or to pursue professional growth through further study and/or graduate work. Additional information is available at the program website (https://www.canisius.edu/academics/programs/physical-education-health/).

Candidates enjoy a continuous and extensive program of clinical and laboratory experiences at the college and through our collaboration with our professional development schools which provide opportunities for in-school observations, micro-teaching, tutoring, and large-group instruction. These experiences help to insure that the program remains responsive to the needs of the candidates, students and the profession. This program of instruction incorporates the standards established for physical education and health at the local school district level, the New York State learning standards for health and physical education, the guidelines set forth by the Society of Health and Physical Educators (SHAPE) America. The teacher certification option culminates with a fourteen-week student teaching experience in the K-12 schools. Each teacher candidate is given the opportunity to experience the privileges and responsibilities of a full-time teacher on both the elementary and secondary levels. An individual choosing to graduate

without completing student teaching must fulfill this credit requirement in consultation with his or her advisor.

Qualifications

Academic Criteria for Endorsement and Completion of Program:

- Cumulative GPA of 2.7 or higher
- Grades of C or higher in major courses
- Satisfactory performance in field placements
- Satisfactory completion of all program common assignments including submission on TaskStream.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Pedagogical Core		
EDU 100	Exploring the Teaching Profession	3
EDU 123	Technology in Education 1	1
EDU 223	Technology in Education 2	1
EDU 323	Technology in Education 3	1
EDU 250	Foundations of Education	3
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3
PED 372	Seminar in Kinesiology	3
PED 380	Concepts of Teaching Sport Skills	3
PED 441	Teaching Methods in Physical Education	3
PED 441L	Teaching Practicum in Physical Education	0
PED 493	Student Teaching Physical Education/Health: Childhood and Adolescence	12
SPE 341	Inclusive Strategies	3
Physical Education Courses		
KIN 235	Kinesiology	3
KIN 494	Capstone in Kinesiology	3
PED 203	Lifetime and Fitness Activities	3
PED 204	Games and Sports	3
PED 207	Individual Performance and Dance Activities	3
PED 305	Outdoor Curriculum and Cooperative Activities	3
PED 306	Early Field Experience Elementary Physical Education	0
PED 307	Early Field Experience Secondary Physical Education	0
PED 311	Movement Education and Elementary Activities	3
PED 351	Coaching Theory and Techniques	3
PED 354	Adapted Physical Education	3
PED 360	Human Growth and Motor Development	3
PED 371	Assessment in Physical Education	3
Health Education Courses		
BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
HED 115	Basic Nutrition	3
HED 205	Wellness and Fitness	3
HED 220	Healthy Behaviors	3
HED 308	Early Field Experience Health	0

HED 325	School Health	3
HED 326	School Health Curriculum	3
HED 337	Exercise Principles and Applications	3
HED 361	Psychology of Sport and Mental Health	3
HED 425	Evolution of Disease and Illness	3
Total Credits		101

Because students are receiving dual certification, they must complete a minimum of 128 credit hours for this major.

Major Experiences

All students in the physical education/health major must meet and continue to meet the professional standards of the program. No one who jeopardizes the health or well-being of a student, classmate or him or herself will continue as a student in the program. All students must possess the necessary physical attributes and exhibit qualities of good judgment and emotional stability. The physical education/health program reserves the right to limit attire and adornments (such as clothing, jewelry, piercing, tattooing) of the body, hands, face, and oral cavity. The program assessment handbook outlines the enforcement of this policy. In all cases, the final appeal may be made to the Program Director/Department of Kinesiology chair.

Additional Considerations and Requirements

All P/HETE field experiences (early field, practicum, and student-teaching) are in the local Western New York area and transportation is required. Out-of-area field experiences must be approved by the Program Director and include an additional fee for each placement. PED 306 and PED 307 require 30 hour field experiences in a K-12 physical education setting, while HED 308 is a 50 hour field experience in health education. PED 441 Lab must be taken in the last semester before student teaching. Proof of professional association membership and current Lifeguarding/CPR/AED certifications must be provided prior to student-teaching. While foreign language is not required for graduation, secondary language proficiency must be demonstrated for New York State licensure. P/HETE majors should consult their advisor for additional course considerations.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
BIO 114 & 114L	BIO 115 & 115L
EDU 100	EDU 123
ENG 111	ENG 112
PED 204 or 305	HED 115 or 220
Field 3 or Field 7	PED 203 or 207
	Field 3 or Field 7
Sophomore	
Fall	**Spring**
HED 115 or 220	HED 205 (or Field 4)
HED 205 (or Field 4)	KIN 235 or EDU 250 (Co-Req EDU 495/ EDU 496)
HED 361	PED 203 or 207
KIN 235 or EDU 250 (Co-req EDU 495/EDU 496)	PED 306 (30hrs Elementary PE)
PED 204 or 305	PED 311
RST 101 or PHI 101	SPE 341
	RST 101 or PHI 101
Junior	
Fall	**Spring**
EDU 223	EDU 323
HED 308 (50 hrs Health)	HED 325
HED 326	PED 307 (30hrs Secondary PE)
HED 337	PED 371
HED 425	PED 372
PED 351	PED 380
Field 1 or 2 (Ethics)	Field 1 or 2 (Ethics)
Senior	
Fall	**Spring**
KIN 494	PED 493
PED 354	EDU 497
PED 360	EDU 498
PED 441	
PED 441L (200hrs W/R/F weekly)[1]	

[1] Valid Professional Membership/LG/CPR/AED

Learning Goals & Objectives

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Physical Education program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Know and apply discipline-specific scientific and theoretical concepts critical to the development of a physically educated person

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Physical Education program will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Demonstrate that they are physically educated individuals with the knowledge and skills necessary to demonstrate competent movement performance and health-enhancing fitness
- Implement developmentally appropriate learning experiences aligned with local, state, and national standards to address the diverse needs of all students.
- Use effective communication and pedagogical skills and strategies to enhance student engagement and learning.
- Utilize assessments and reflection to foster student learning and inform instructional decisions.

Learning Goal 3 (SERVICE)
Candidates in the Physical Education program will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Learning Goal 4 (PROFESSIONALISM)
Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

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Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Coaching Minor

The Coaching Minor is a common minor for many physical education students. The courses in the minor can be attached to any major. Completion of the minor often leads to graduate work at the master's degree level in Coaching Science. The courses can also lead to NY State certification. The minor focuses upon the principles of effective coaching including the role of the coach, practice planning, leadership styles, organization and management, ethics and values clarification, goal setting, communication, career objectives, coaching burn-out and sport psychology. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship. Some kinesiology courses have specific prerequisites, which are stated in the course descriptions.

Coaching Minor Courses

Code	Title	Credits
PED 351	Coaching Theory and Techniques	3
PED 365	Principles and Philosophy of Coaching	3
HED 205	Wellness and Fitness	3
or HED 337	Exercise Principles and Applications	
HED 115	Basic Nutrition	3
HED 321	Lifeguard, C.P.R., First Aid, WSI	3
or KIN 170	Emergency Care	
PED 380	Concepts of Teaching Sport Skills	3
Total Credits		18

Note: Dr. Clancy M. Seymour serves as the advisor for the coaching minor program in the Department of Kinesiology.

Courses

HED 115 Basic Nutrition **3 Credits**
This course will address all aspects of proper nutrition. The class will address material such as macronutrients, micronutrients, daily caloric intake and portion sizes. Students will gain knowledge of nutrition through class lectures, interactive activities and peer presentations. Upon successful completion of the course, students will have a working knowledge of proper nutrition and appropriate dietary habits.
Offered: fall & spring.

HED 205 Wellness and Fitness **3 Credits**
Lecture and laboratory. Skills, teaching methods, resource units, evaluative instruments, teaching aids, leading to an overall understanding of the principles of health and wellness. Focus on physical fitness testing, cardiovascular exercise, muscular strength, muscular endurance, flexibility and body composition. There is additional focus on special populations, childhood obesity and the development of a personal fitness program.
Prerequisite: BIO 114 & BIO 114L.
Offered: every fall & spring.

HED 220 Healthy Behaviors **3 Credits**
Examines health determinants and the effects on all seven dimensions of health. Assessment of personal lifestyle behaviors and factors influencing current and relevant health issues. Emphasis on personal behavior modification to practice health-enhancing behaviors and to reduce health risks. Guidelines for healthy practices related to nutrition, mental health, cancer prevention, HIV/STDs, cardiovascular disease, stress management, sexuality, physical fitness, drugs and alcohol and relationships. Establishes foundation for living healthy and productive lives.
Offered: fall & spring.

HED 308 Early Field Experience Health **0 Credits**
The teacher candidate will participate in K-12 school level health education. To successfully complete this experience the candidate will complete a 30 hour placement with an assigned local health educator.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.

HED 321 Lifeguard, C.P.R., First Aid, WSI **3 Credits**
Knowledge, skill techniques and appreciations necessary to meet certification requirements of the American Red Cross. Certification fee required for this course.
Prerequisite: department swimming test and completion of departmental recommendation. **Restriction:** must be in the undergraduate or graduate must be physical education program.
Offered: fall.

HED 325 School Health **3 Credits**
Students explores the most prevalent health and safety issues of schoolaged children and youth and examines rationale for health education, theories, methods, strategies, and techniques of health education program planning. Additionally, students will plan effective comprehensive school health education programs: integration of school and community services.
Restriction: must be physical education or physical and health education major.
Offered: spring.

HED 326 School Health Curriculum **3 Credits**
Students will practice strategies and methodologies needed for effectively teaching health education. Students will participate in 50 hours of field experience, if they have not already done so, and will analyze experiences as a process to improving instruction. Students will demonstrate their ability to plan for instruction by writing and implementing learning experiences that meet the National Health Education Standards.
Restriction: must be physical education or physical and health education major.
Offered: fall.

HED 337 Exercise Principles and Applications **3 Credits**
This course will address the many aspects of fitness and exercise. Students will experience classroom lecture as well as practical experience in the weight room and other alternative exercise facilities. Students will gain experience in the proper design of exercise programs and will understand the importance of periodization as it relates to exercise. Upon successful completion of this course, the student will have a vast knowledge of the principles surrounding strength and conditioning.
Prerequisite: minimum grade of C in BIO 114 & BIO 114L.
Offered: fall & spring.

HED 361 Psychology of Sport and Mental Health **3 Credits**
This course address sport psychology from a sports studies perspective incorporating interdisciplinary knowledge from the social sciences. It is an appropriate approach for many students seeking to understand the psychological processes facing athletes in a competitive environment. Considerable interest surrounds the efforts of sport psychologists to optimize the performance of those characters we call athletes - the sport heroes of our society. Superior athletic performance has long held great intrigue. Tremendous improvements in the identification and measurement of the psychological factors related to athletic performance have resulted in significant improvements in an athlete's ability to produce top level performance on a consistent basis. This course focuses on the application of these psychological principles by athletes, coaches and sport psychology consultants in what has been a quest to produce the ultimate athlete.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.

HED 425 Evolution of Disease and Illness **3 Credits**
Overview of humanity's triumphs and failures in the ongoing fight against illness and disease. Explores history of disease, current health issues and trends to determine outlook for emerging health concerns of the future. Examines various models of disease to explain disease agents and route of transmission throughout the body's systems. Analysis of disease occurrence, predisposing factors, body's immune response, symptoms, prevention, treatment and control.
Offered: fall & spring.

PED 203 Lifetime and Fitness Activities **3 Credits**
A content-focused physical education course that includes an emphasis on sport and fitness being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports, it also serves to expose students to other cultures that participate in these lifetime activities. Improving or maintaining fitness will be the focus of this class and might include activities like, but not limited to yoga, pilates, resistance training, spinning, running, fitness walking, fitness swimming, water polo, kickboxing, cardio-kick, zumba and exergaming. A 4-5 week unit on aquatics will also be included in this course. The course also provides coinciding opportunities to gain awareness of cultural variations and regional circumstances, through the lens of a particular sport. Students will be required to demonstrate movement competence in various sports and activities.
Fulfills College Core: Global Awareness
Offered: spring of odd-numbered years.

PED 204 Games and Sports **3 Credits**
A content-focused physical education course that includes an emphasis on sport being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports, it also serves to expose students to other cultures that participate in these activities. This includes the games categories of invasion, net/wall, target and fielding/striking. It also provides coinciding opportunities to gain awareness of cultures, and communities, and societies, through the lens of a particular sport. Students will be required to demonstrate movement competence in various games categories (invasion, net and target, etc.).
Fulfills College Core: Global Awareness
Offered: fall of odd-numbered years.

PED 207 Individual Performance and Dance Activities **3 Credits**
Students will learn appropriate organization and teaching progressions for various forms of individual-performance and dance activities taught in the P-12 curricula. Might include, but are not limited to gymnastics, figure skating, track and field, multi-sport events, in-line skating, wrestling, self-defense and skateboarding. Dance or rhythms activities that may focus on, but not limited to dance forms such as creative movement and dance, ballet, modern, ethnic/folk, hip hop, Latin, line, ballroom, social and square.
Offered: spring of even-numbered years.

PED 305 Outdoor Curriculum and Cooperative Activities **3 Credits**
Philosophy, teaching methods, programming and safety management. Activities may include initiatives, new games, problem solving, trust activities, ropes course, cycling, mountain biking, rock climbing, rappelling, cross-country skiing and others.
Offered: fall of even-numbered years.

PED 306 Early Field Experience Elementary Physical Education **0 Credits**
The teacher candidate will participate in K-6 elementary physical education. To successfully complete this experience the candidate will complete a 30 hour placement with an assigned local physical educator.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.

PED 307 Early Field Experience Secondary Physical Education **0 Credits**
The teacher candidate will participate in 7-12 secondary physical education. To successfully complete this experience the candidate will complete a 30 hour placement with an assigned local physical educator.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.

PED 311 Movement Education and Elementary Activities **3 Credits**
Conceptual bases, perceptual-motor development and practical applications of movement education. Development, implementation and integration of a physical education program; teaching strategies geared to the elementary level classroom with emphasis on New York and national learning standards in Physical Education. Field experience required.
Restriction: must be physical education or physical and health education major.
Offered: spring.

PED 351 Coaching Theory and Techniques **3 Credits**
Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children and young adults. Many participate at the 'house' league level, while others are involved with more competitive and elite programs. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, ethics and values clarification. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.
Offered: fall.

PED 354 Adapted Physical Education **3 Credits**
Designed to provide students with an exposure to education, physical education, sport and recreational programming for children with disabilities. Content focuses on variety of disabilities eligible for service under the Individuals with Disabilities Act (IDEA) and the ability to design, conduct, and assess a physical education program that is appropriate for this population. Service-Learning required.
Restriction: must be physical education or physical and health education major.
Fulfills College Core: Diversity
Offered: fall.

PED 360 Human Growth and Motor Development **3 Credits**
Examination of principles of growth and developmental theory with an emphasis on factors affecting changes in movement potential of individuals.
Restriction: must be physical education or physical and health education major.
Offered: fall.

PED 365 Principles and Philosophy of Coaching **3 Credits**
Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children, young adults and students. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, practice planning, leadership styles, organization and management, ethics and values clarification, goal setting, communication, career objectives, coaching burn-out and sport psychology. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.
Restriction: KIN department majors only.
Offered: spring.

PED 371 Assessment in Physical Education **3 Credits**
This course will introduce the teacher candidate to assessment and its role in the physical education profession. Topics include fitness testing, integrating physical education assessment tools, and basic statistics. In addition, there will be a focus on the evaluation of the New York State Standards, authentic assessments and SHAPE America guidelines.
Restriction: must be physical education or physical and health education major; permission of program director.
Offered: spring.

PED 372 Seminar in Kinesiology **3 Credits**
The course requires students to engage in professional writing; students will be taught how to conduct and write about a given topic. All course-content will be research-based, and students will be encouraged to see the connections between the research used throughout the class and the specific topic they are reviewing for the extended writing project.
Restriction: KIN department majors only.
Fulfills College Core: Advanced Writing-Intensive
Offered: spring.

PED 380 Concepts of Teaching Sport Skills **3 Credits**
The purpose of this course is to give each student an in depth exposure to and an understanding of the various motor learning principles and factors influencing the acquisition of motor skills. The central focus of the course will be directed to the learning process. Age appropriate activities and instructional guidelines will be examined. This includes the variables related to the learner, the skills to be acquired and the instructional procedures that can be used by the physical educator, coach or exercise specialist.
Restriction: must be physical education or physical and health education major.
Offered: spring.

PED 441 Teaching Methods in Physical Education **3 Credits**
Development, implementation and integration of a physical education program; teaching strategies for K-12 physical education with emphasis on New York and national learning standards in Physical Education.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Fulfills College Core: Oral Communication
Offered: fall.

PED 441L Teaching Practicum in Physical Education **0 Credits**
The teacher candidate will train for student teaching at the K-12 school level. To successfully complete this experience the candidate will finish a series of modules designed to bridge the gap between the college classroom and the teaching setting.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.

PED 493 Student Teaching Physical Education/Health: Childhood and Adolescence **12 Credits**
Two seven-week, full-time student teaching experiences with one placement in an elementary school (Grades 1-6) and the other placement in a high school (Grades 7-12) culminating in preparation for teacher certification. Grade: Pass/Fail. The combination of PED 493, EDU 495, EDU 496, EDU 497, and EDU 498 during the student teaching semester will count as a full semester of three courses, 15 credit hours.
Prerequisite: Completion of all other course requirements and department approval, and minimum GPA of 2.7 in all major courses. **Corequisite:** EDU 497 & EDU 498. **Restriction:** permission of program director.
Offered: fall & spring.

PED 499 Independent Study **1-3 Credits**
Independent study with a Kinesiology faculty member with emphasis on research in Physical Education. Independent studies require an application and approval of the associate dean.
Prerequisite: permission of instructor, department chair, & associate dean.
Offered: occasionally.

Special Education/Childhood Ed (BS)

Chair: Barbara A. Burns, PhD

Introduction

This major prepares candidates in Childhood Education which covers Grades 1-6 and Childhood Special Education which covers Grades 1-6 for Students with Disabilities. It contains pedagogical knowledge and skills to ensure that candidates are qualified to teach at these levels and in high needs classroom settings. Many courses are infused with field experiences so candidates build skill as they progress through the program. In addition, each candidate must take coursework as set forth in the Canisius College Core Curriculum and must also choose a 30 credit liberal arts concentration to ensure that they have the content knowledge necessary to teach children from Grades 1-6 in general and special education settings. More information can be found at the program website (https://www.canisius.edu/academics/programs/special-education-childhood-education-undergraduate/). (http://www.canisius.edu/teacher-ed/special-ed/)

Qualifications

Students must meet the requirements at all transition points in order to graduate with an education degree and be recommended for teacher certification. Please see School of Education and Human Services website for transition point requirements.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
ECCH 221	Emergent Literacy	3
ECCH 222	Literacy and the Arts in the Elementary Classroom	3
ECCH 412	Managing the Early Childhood and Elementary Classroom	3
EDE 100	Human Growth and Development - Birth through Childhood	3
EDE 390	Cognition, Learning and Assessment - Birth through Childhood	3
EDU 100	Exploring the Teaching Profession	3
EDU 123	Technology in Education 1	1
EDU 223	Technology in Education 2	1
EDU 250	Foundations of Education	3
EDU 272	Teaching Social Studies Integrating English Language Arts	3
EDU 323	Technology in Education 3	1
EDU 356	Assessment for Instructional Decision Making	3
EDU 428	Teaching Math & Science: Supporting STEM Education	3
EDU 494	Capstone Seminar for Teacher Candidates	3
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3
SPE 291	Nature and Needs of CH Students with Learning Disabilities	3
SPE 292	Remedial Strategies in the Childhood Content Areas	3
SPE 311	Nature/Needs of Childhood Students with Intellectual Disabilities & Autism Spectrum Disorders	3
SPE 330	Nature/Needs of Childhood Students with Behavioral Disorders	3
SPE 341	Inclusive Strategies	3
SPE 432	Seminar in Teaching and Assessment	3
or EDU 432	Pre Student Teaching	
SPE 493	Supervised Student Teaching	12

or EDU 493	Student Teaching	
Total Credits		69

Optional Extensions to Teach at Additional Grade Levels

Middle Childhood Extension

Candidates wishing to obtain an extension to teach grades 7-9 in their area of concentration (English, Mathematics, Social Studies, or Spanish) must take EMC 352 and EMC 391 in addition to the courses listed.

Early Childhood Extension

Candidates wishing to obtain a certification to teach grades B-2 are advised to take two early childhood courses that focus on learning and development and methods of instruction in addition to the courses listed, and apply for an individual evaluation of credentials through NYSED or the BOCES Regional Certification Office. Courses that students have taken in the past include EDY 208 and EDY 209 .

Additional Curriculum Requirements

Childhood majors need to choose one of the following academic concentrations: English, Mathematics, Music, Science, Social Studies, Spanish, or Social Justice.

English Concentration

Code	Title	Credits
ENG 111	Academic Writing	3
ENG 112	Writing about Literature	3
ENG 299	Introduction to English Studies [1]	3
Two 200-level literature courses		6
One pre-1900 American Literature course [2]		3
One pre-1800 British Literature course [3]		3
One Shakespeare course [4]		3
Two writing courses [5]		6
Total Credits		30

1. Must take at least one 200-level literature course before taking ENG 299.
2. Choose from ENG 315, ENG 316, ENG 319, or ENG 396 (if the topic is American Literature)
3. Choose from ENG 233, ENG 301, ENG 305, ENG 306, ENG 332, ENG 347, ENG 370, or ENG 373.
4. Choose from ENG 322 and ENG 323.
5. Choose from EDU 410, ENG 205, ENG 294, ENG 383, ENG 385, ENG 388, ENG 389, ENG 391, ENG 392, ENG 393, ENG 411, or ENG 490.

Mathematics Concentration

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 219	Linear Algebra	4
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 331	Geometry	3
MAT 351	Probability & Statistics I	3
Choose one of the following:		3-4
MAT 211	Calculus III	
Computer Science elective		
Choose one of the following:		3-4
MAT 222	Differential Equations	
Math elective		
Total Credits		32-34

Music Concentration

Code	Title	Credits
FAM 115	Fundamentals of Music	3
FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230 & 230L	Music Theory I and Music Theory I Lab	4
FAM 240 & 240L	Music Theory II and Music Theory II Lab	4
FAM 330 & 330L	Music Theory III and Music Theory III Lab	4
One Music Literature I course [1]		3
One Music Literature II course [2]		3
One Music elective [3]		3
Total Credits		30

1. Choose from FAM 216, FAM 217, FAM 218, FAM 219, or FAM 220.
2. Choose from FAM 123, FAM 124, or FAM 224.
3. Choose any 3-credit course with an FAM prefix.

Science Concentration

Code	Title	Credits
GEO 325	Introduction to Physical Geography	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
One physics course		3
Two science electives [1]		6
Total Credits		32

1. Choose any 2 courses with a BCH, BIO, CHM, or PHY prefix.

Social Studies Concentration

Code	Title	Credits
ECO 101	Principles of Macroeconomics	3
GEO 325	Introduction to Physical Geography	3
PSC 104	American Political Process	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3

HIS 124	History of the United States: 1877 to the Present	3
HIS 254	First Peoples	3
One European or Asian/African/Latin American History elective		3
Total Credits		30

Note: HIS 382 is highly recommended for students intending to teach in New York State.

Social Justice Concentration

Code	Title	Credits
Foundations Course		3
SOC 273	Social Movements and Social Change	
Research Courses (select two of the following)		6
ANT 351	Qualitative Research Methods	
HSV 303	Research Methods in the Social Sciences	
SOC 342	Social Research Methods	
Skills Classes (select two of the following)		6
COM 201	Oral Communication	
COM 204	Interpersonal Communication	
COM 302	Small Group Communication	
ECO 311	Metropolitan Economic Development and GIS	
PSC 237	State and Local Politics	
PSY 329	Leadership and Motivation	
Four Electives (from your focus: Local/Urban or Global)		12
Local (Urban) Focus Electives [1]		
HIS 382	New York State History	
HSV 300	Social and Cultural Diversity	
HSV 301	Social Policies	
or SOC 111	Contemporary Social Problems	
HSV 302	Children, Schools, and the Community	
PSC 237	State and Local Politics	
SOC 340	Sociology of the City	
Global Focus Electives [1]		
ANT 122	Sociocultural Anthropology	
HIS 211	Women In The Western World	
HIS 358	Traditional Japan	
HIS 394	Modern Middle East	
PSC 241	Human Rights and Globalization	
HSV 300	Social and Cultural Diversity	
HSV 302	Children, Schools, and the Community	
Elective		3
One course from the other focus (either Local or Global)		
Total Credits		30

[1] The list of courses provided here only includes active courses at the time this catalog was prepared. Additional classes that are added by other departments might also be used to satisfy this requirement. If you think a class should count, please contact the chair of the Teacher Education Department.

Spanish Concentration

Code	Title	Credits
SPA 215	Intermediate Spanish [1]	3
SPA 217	Introduction to Spanish Composition [1]	3
SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3
Five Advanced-Level Spanish Classes (any SPA class at 300 or 400 level)		15
Total Credits		30

[1] Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students still will take 10 courses for the concentration.

Please note that this curriculum changed for students who matriculated in fall 2017 or later. Earlier students should consult their original catalog year.

Roadmap

Freshman

Fall	Spring
EDE 100	ECCH 221
EDU 100	SPE 341
EDU 123	EDY 208 (Optional - may be used to apply to NYSED or BOCES for early childhood certification)

Sophomore

Fall	Spring
EDU 250	SPE 291
EDU 495	SPE 292
EDU 496	EDU 272
ECCH 222	
EDU 223	
EDY 209 (Optional - may be used to apply to NYSED or BOCES for early childhood certification)	
EMC 391 (Optional - needed for middle school extension)	

Junior

Fall	Spring
SPE 311	SPE 330
EDU 356	ECCH 412
EDU 323	EMC 352 (Optional - needed for middle childhood extension)
EDE 390	

Senior

Fall	Spring
SPE 432	SPE 493
EDU 428	EDU 497
EDU 494	EDU 498

Learning Goals & Objectives

Learning Goal 1 (KNOWLEDGE – Observed in Writing)
Candidates in the Teacher Education programs will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Teacher candidates will:

- Acquire knowledge of each student, and demonstrate knowledge of student development and learning to promote achievement for all students.
- Know the content they are responsible for teaching, and the pedagogical content knowledge to plan instruction that ensures growth and achievement for all students.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)
Candidates in the Teacher Education programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Teacher candidates will:

- Demonstrate professional dispositions and implement instruction that engages and challenges all students to meet or exceed the learning standards.

Learning Goal 3 (SERVICE)
Candidates in the Teacher Education programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Teacher candidates will:

- Work with all students to create a dynamic learning environment that supports achievement and growth.
- Use multiple measures to assess and document student growth, evaluate instructional effectiveness, and modify instruction for diverse learners.

Learning Goal 4 (PROFESSIONALISM)
Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Teacher candidates will:

- Set informed goals and strive for continuous professional growth.

Learning Goal 5 (LEADERSHIP)
Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Teacher candidates will:

- Demonstrate professional responsibility and engage relevant stakeholders to maximize impact on student growth, development, and learning.

Courses

Please note that Students in Special Education also take courses in Teacher Education and Childhood Education. A full list of courses in all Education subjects is available on the Educator Preparation page. (p. 297)

SPE 291 Nature and Needs of CH Students with Learning Disabilities **3 Credits**

Describes the effect of mild disabilities on childhood. Focuses on collaborative strategies for parental involvement. Highlights the CSE process, placement options and instructional strategies in grades one to six. Requires 20 hours field placement.
Prerequisite: SPE 341. **Corequisite:** SPE 292.

SPE 292 Remedial Strategies in the Childhood Content Areas **3 Credits**

Describes appropriate techniques and materials for instruction to students with disabilities and those at risk of failure. Emphasizes assistive technology for students in childhood classrooms across the curriculum.
Prerequisite: SPE 100. **Corequisite:** SPE 291.

SPE 311 Nature/Needs of Childhood Students with Intellectual Disabilities & Autism Spectrum Disorders **3 Credits**

Describes effects of MR and other developmental disabilities on childhood. Focuses on collaborative strategies for parental involvement. Highlights instructional strategies for grades 1-6 across the continuum of services. Requires 20 hours field placement.
Prerequisites: SPE 291 & SPE 292. **Corequisite:** EDU 356.
Offered: occasionally.

SPE 312 Multidisciplinary Assessment and Childhood Teaching **3 Credits**

Emphasizes a multidisciplinary approach to meet the assessment and learning needs of childhood students with disabilities. Explores assessment and evaluation using the New York State Standards for Severe Disabilities and the Alternative Performance Indicators.
Prerequisite: SPE 291 & SPE 292. **Corequisite:** SPE 311.

SPE 330 Nature/Needs of Childhood Students with Behavioral Disorders **3 Credits**

Describes the effect of Emotional and Behavioral Disorders on children and their families. Highlights NYSED Regulations, collaboration and instructional strategies to address academic and behavioral issues. Requires 20 hours of field placement.
Prerequisites: SPE 311 & EDU 356. **Corequisite:** ECCH 412.
Offered: occasionally.

SPE 335 Classroom Management in Childhood Classrooms **3 Credits**

Discusses implications of behavior management and importance of a proactive approach to prevent behavior problems. Emphasizes appropriate classroom structure, and individual and group contingencies to support children with E/BD in grades 1-6.
Prerequisite: SPE 311 & SPE 312. **Corequisite:** SPE 330.

SPE 341 Inclusive Strategies **3 Credits**
Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration.
Fulfills College Core: Diversity

SPE 432 Seminar in Teaching and Assessment **3 Credits**
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the special education-childhood level. Requires 50 hours of field placement.
Fulfills College Core: Oral Communication

SPE 493 Supervised Student Teaching **12 Credits**
Highlights knowledge, skills and dispositions of professional educators. One full-time 7-week placement in each childhood and special education-childhood classroom requires candidates to become the instructional reader under the supervision of cooperating teachers and college faculty.
Prerequisite: signature, minimum GPA of 2.70, minimum grade of C in each required education course, some schools may require certain health tests.
Corequisite: EDU 494 & EDU 497.
Offered: every spring.

SPE 495 Advanced Research Seminar in Autism **1-6 Credits**
Advanced Research Seminar in Autism provides students with advanced clinical and research training in autism spectrum disorder (ASD). The course consists of two distinct but interrelated components including (1) classroom instruction and applied training in evidence-based treatment for children with ASD and (2) hands-on research experience during studies being conducted. Students will learn about ASD and evidence-based treatments, and participate in various studies involving high-functioning youth with ASD. Students also serve as a member of a professional research team..

SPE 499 Independent Study **3 Credits**
Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

Health and Wellness (BS)

Co-Chairs: Nicholas Lorgnier and Shawn O'Rourke
Director: Charles Pelitera

Introduction

The major will provide a Bachelor of Science degree that will allow graduates the opportunity to be employed in facilities offering personal health and fitness programs ranging from health clubs and corporate fitness/wellness to physician-based wellness programs. Student eligibility for certification through organizations such as the National Strength and Conditioning Association, American College of Sports Medicine, National Academy of Sports Medicine and American Council on Exercise will be available following completion of the degree. Additionally, a minor in an area such as business could allow the student to pursue management positions in the fitness industry or lead them into areas related to sport administration. More information about opportunities for students is available at the program website (https://www.canisius.edu/academics/programs/health-wellness/).

Many students in health and exercise-related fields go on to graduate school. Students in this major may take electives to meet competitive admissions requirements for graduate programs in related fields. Through the use of guided electives, students will have the ability to complete pre-requisites for other health care professions. Examples include professions such as physical therapy, occupational therapy, chiropractic, physician's assistant, and for an exceptional few medical school.

Admission to these graduate programs is extremely competitive and requires a strong academic record and standardized test results and many programs also expect evidence of leadership, service/volunteerism, written and oral communication skills and a working knowledge of the health profession. Students must work closely with the Canisius College Pre-Med director for advisement and the professional school of interest to determine the curriculum electives needed to satisfy necessary prerequisites.

Qualifications

Students must achieve a C or above in the following courses: BIO 114 and lab, BIO 115 and lab, KIN 170, HED 205, HED 337 and KIN 235 and also maintain a 2.3 GPA in their major and a 2.3 overall average to graduate with a degree in Health and Wellness. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students interested in graduate work in a pre-professional program (Physical Therapy, Chiropractic, Occupational Therapy, Physician's Assistant, etc.) should seek advisement through the Canisius College Pre-Med director in addition to the major advisor.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
KIN 170	Emergency Care	3
HED 205	Wellness and Fitness	3
KIN 235	Kinesiology	3
HED 115	Basic Nutrition	3
PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
HED 220	Healthy Behaviors	3
KIN 336 & 336L	Physiology of Exercise and Physiology of Exercise Lab	4
HED 337	Exercise Principles and Applications	3
HED 361	Psychology of Sport and Mental Health	3
HED 425	Evolution of Disease and Illness	3
ATH 398	Statistics and Research Design	3
KIN 350	Organization and Administration of Health and Wellness	3
KIN 498	Internship in Health and Wellness (240 required hours)	6
Total Credits		54

Major Electives

Health and Wellness majors should consult their advisor to identify free electives that might complement the major requirements.

Major Experiences

All students in the health and wellness major must meet and continue to meet the professional standards of the program. No one who jeopardizes the health or well-being of a client/patient, classmate or him or herself will continue as a student in the program. All students must possess the necessary physical attributes and exhibit qualities of good judgment and emotional stability.

The Health and Wellness program reserves the right to limit attire and adornments (such as clothing, jewelry, piercing, tattooing) of the body, hands, face, and oral cavity. The program assessment handbook outlines the enforcement of this policy. In all cases, the final appeal may be made to the Department of Kinesiology chair.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
BIO 114 & 114L	BIO 115 & 115L
HED 115	KIN 170
ENG 111	ENG 112
Field 3 or 4	Field 3 or 4
Elective	Elective
Sophomore	
Fall	**Spring**
KIN 235	PHI 101
PSY 101	HED 205
RST 101	HED 425
HED 220	PSY 102
Elective	Elective
Junior	
Fall	**Spring**
KIN 336 & 336L	HED 361
Field 1 or 2	ATH 398
Attribute	Field 1 or 2
Attribute	HED 337
Elective	Elective
Senior	
Fall	**Spring**
KIN 350	KIN 498
Elective	Core Capstone
Elective	Elective
Elective	Elective

Additional Course Considerations

Health and Wellness majors should consult their advisor for additional course considerations.

Learning Goals & Objectives

Learning Goal 1 (KNOWLEDGE – Observed in Writing)
Candidates in the Health and Wellness program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Identify and appraise the content of appropriate health information, services and products.
- Assess health behaviors related to fitness, nutrition, relationships, substance use and abuse, and the environment.
- Interpret the scientific literature in regard to aspects of human nutrition.
- Describe how disease and illness affects the various body systems.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)
Candidates in the Health and Wellness program will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Design and implement an exercise program for an individual client.
- Develop an exercise progression for a team that reduces risk and maximizes benefit.
- Utilize the epidemiological model of disease and disorders by examining predisposing factors, symptoms, preventions, treatment and control.

Learning Goal 3 (SERVICE)
Candidates in the Health and Wellness programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Design and implement an exercise program for an individual client.
- Develop an exercise progression for a team that reduces risk and maximizes benefit.
- Demonstrate the ability to modify exercise programs based on age, skill, setting, specificity and progress.

Learning Goal 4 (PROFESSIONALISM)
Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Demonstrate and instruct on standardized testing techniques involved in fitness assessment.
- Demonstrate and instruct proper functional movements involved in strength and conditioning.

Learning Goal 5 (LEADERSHIP)
Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Students will:

- Students will develop confidence and proficiency in their ability to communicate health related information through oral communication.
- Students will develop confidence and proficiency in their ability to communicate health related information through written communication.

Minors

Strength and Conditioning Minor (p. 331)

Health and Human Performance Minor (p. 330)

Health and Human Performance Minor

Health and Human Performance Minor Curriculum

Code	Title	Credits
BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
ATH 373	Nutritional Issues Athl Train	3
KIN 235	Kinesiology	3
KIN 336	Physiology of Exercise	3
HHP 337	Research Exercise Physiology	3
HHP 420	Exercise Test & Prescription	3

Strength and Conditioning Minor

The Strength and Conditioning minor is a common minor for health and wellness and physical education students. The minor provides students with preparation for the fields of strength and conditioning, wellness, and for related graduate work. It also helps students prepare for specialty certifications through the National Strength and Conditioning Association, the American College of Sports Medicine and the National Academy of Sports Medicine. Strength and conditioning courses have specific pre-requisites, which are stated in the course descriptions.

Admission to the Strength and Conditioning minor is competitive due to a limited number of student slots available and is based on skills and knowledge competencies acquired in BIO 114 and lab, BIO 115 and lab, and KIN 235. Each course must be completed with a grade of C (2.0) or higher. The applicant must attain a minimum C (2.0) cumulative GPA in these five courses and an overall college GPA of C (2.0) or higher. Majors from other departments are eligible for selection by meeting the above requirements. Students interested in the Strength and Conditioning minor at Canisius College must complete a Change of Major/Minor form. Application for the minor must be completed following enrollment in KIN 235.

Note: Dr. Karl Kozlowski and Dr. Chuck Pelitera serve as advisors for the Strength and Conditioning minor program in the Department of Kinesiology.

Strength and Conditioning Minor Curriculum

Code	Title	Credits
BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
KIN 235	Kinesiology	3
KIN 336	Physiology of Exercise	3
HED 337	Exercise Principles and Applications	3
HED 115	Basic Nutrition	3
PED 365	Principles and Philosophy of Coaching	3
KIN 420	Strength & Conditioning Applications	3
Total Credits		26

Human Services (BS)

Director: Robert Nida, PhD

Introduction

The field of human services is an applied academic discipline that involves the study of social systems with the goal of finding solutions to prevent and remediate human problems. The discipline seeks to meet basic human needs and advocate for change in societal systems that affect the lives of individuals. In accordance with these goals, the Human Services program is designed to prepare students for professional work in the public, private, non-profit, and for-profit sectors. A degree in Human Services also enables students to pursue graduate studies in social work, counseling, public policy, public administration, and other social sciences programs.

The course work in the major is based on sound theory and research and offers a broad and coherent foundation of knowledge in the discipline. Students have the opportunity to take field-based coursework through practica and supervised internships within human service agencies. The program also offers flexibility, in that students are permitted to choose from one of two tracks:

- Schools and Community
- Child, Youth and Family Development

Please see the department's website (https://www.canisius.edu/academics/programs/human-services/) for a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities.

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in human Services. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Major Experiences

Human Services majors are encouraged to become active members in the service opportunities provided on campus. Service opportunities include joining the Griffins Giving Back club and attending service trips both domestically and internationally through our Campus Ministry office.

Getting involved with organizations such as these can increase one's awareness of the social problems impacting our society and obtain first-hand experience with the fields they may choose to enter.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

All Human Services Majors

Code	Title	Credits
COM 204	Interpersonal Communication	3
COM 302	Small Group Communication	3
EDE 100	Human Growth and Development - Birth through Childhood	3
or EDS 101	Human Growth and Social Development: Adolescence	
HSV 100	Introduction to Human Services	3
HSV 201	Introduction to Family Dynamics	3
HSV 212	Social and Cultural Diversity	3
HSV 301	Social Policies	3
HSV 303	Research Methods in the Social Sciences	3
HSV 360	People Helping Skills	3
HSV 400	Management of Human Service Agencies	3
HSV 480	Wellness - Be All That You Can Be	3
HSV 495	Field Internship	6
HSV 498	Practicum in Human Services	3
Electives: Choose 3 electives from one of the two concentrations listed below		9
Total Credits		51

Major Electives

In addition to the required courses, you need to choose one of two concentrations: schools and community, or child, youth and family development. Each concentration requires the completion of 3 electives in that specific area. Exceptions can be made in consultation with the program director.

Code	Title	Credits
Schools and Community		
HSV 302	Children, Schools, and the Community (1)	3
ECCH 221	Emergent Literacy	3
ECCH 222	Literacy and the Arts in the Elementary Classroom	3
ECCH 412	Managing the Early Childhood and Elementary Classroom	3
EDS 360	Evaluation and Teaching Strategies	3
EDS 402	Methods of Teaching English: Adolescence	3
EDS 403	Methods of Teaching Mathematics: Adolescence	3
EDS 404	Methods of Teaching Modern Languages: Adolescence	3
EDS 405	Methods of Teaching Science: Adolescence	3
EDS 406	Methods of Teaching Social Studies: Adolescence	3
EDU 428	Teaching Math & Science: Supporting STEM Education	3
EMC 352	Human Growth and Social Development: Middle Childhood	3
PSY 334	Child, Family and Community Psychology	3
SPE 341	Inclusive Strategies	3
Child, Youth, and Family Development		
HSV 302	Children, Schools, and the Community (1)	3
COM 205	Mass Communication and Society	3
COM 304	Family Communication	3
CRJ 337	Violence and the Family	3
CRJ 354	Juvenile Delinquency	3
EMC 352	Human Growth and Social Development: Middle Childhood	3
PSY 203	Lifespan Developmental Psychology	3
PSY 303	Abnormal Psychology	3
PSY 307	Adolescent Psychology	3
PSY 384	Child & Adolescent Psychopathology	3

[1] HSV 302 is required for either concentration in the Human Services major

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
HSV 100	HSV 201
EDE 100	COM 204
Sophomore	
Fall	**Spring**
HSV 301	HSV 212
COM 302	HSV 360
Junior	
Fall	**Spring**
HSV 303 (may be taken fall or spring)	HSV 303 (may be taken fall or spring)
HSV 400	Major Elective
Major Elective	HSV 302
Major Elective	concentration requirement
Senior	
Fall	**Spring**
HSV 480 (Capstone)	HSV 480
Major Elective	HSV 495
HSV 495	

Learning Goals & Objectives

Learning Goal 1: Candidates in the Human Services Program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Demonstrate knowledge of the basic concepts and theories of the field of human services
- Demonstrate knowledge of research methodologies used in the field of human services
- Demonstrate and understanding of how individuals, families, and cultures function in society and the relationships among societal structures.

Learning Goal 2: Candidates in SEHS programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Apply human services concepts and theories to specific problems of human society
- Apply quantitative and qualitative research methodologies to solve problems in society
- Demonstrate good people helping and communication skills
- Demonstrate effective leadership skills

Learning Goal 3: Candidates in SEHS programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Actualize the Canisius College Jesuit mission by providing "cura personalis" to clients of human service agencies
- Understand how personal and societal change takes place and how to facilitate change in a constructive way
- Acquire and apply ethical and moral decision making practices in the field of human services.
- Demonstrate best practices in the field of human services

Learning Goal 4: Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Learn evidence-based intervention strategies in the field of human services
- Learn evidence-based assessment instruments to measure program quality and to use the evidence to make effective changes in professional practice
- Learn fundamentals of designing and managing professional agencies and how to adapt in response to individual, familial, and societal demands.

Learning Goal 5: Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community

Students will:

- Demonstrate the ability to reflectively connect their efforts to the success and well-being of those that they serve.

Courses

HSV 100 Introduction to Human Services **3 Credits**
This course explores the historical context and the current structure and function of the field of human services. The student will become knowledgeable about the many roles and functions of human service professionals and the primary intervention strategies utilized in the field. The special populations served in the human services profession will be examined. Various topics include the bio-ecological systems theory, values and ethical dilemmas, the social welfare system, human diversity, legal issues, program planning and organization, agency administration, and people helping skills.
Offered: every fall.

HSV 201 Introduction to Family Dynamics **3 Credits**
This course consists of an overview of the dynamics of family relationships and issues related to families and relationships. The purpose of this course is to provide students with a basic understanding of family theory and an introduction to systematic approaches and techniques when working with couples and families. This didactic class includes lecture and PowerPoint presentations, videos and demonstrations, small group discussions, whole class discussions, and written assignments.

HSV 212 Social and Cultural Diversity **3 Credits**
This course is designed to address contemporary issues of cultural and social diversity in the United States. Its main goal is to help students develop through understanding of how social and cultural diversity impacts one's life. It also emphasizes the importance of becoming a culturally and socially competent person to better serve the needs of an increasingly globalized society.
Fulfills College Core: Diversity
Offered: every spring.

HSV 301 Social Policies **3 Credits**
This course examines the characteristics of social policy in general and in education in particular. Special attention is given to policy development and implementation in relation to its effects on underprivileged populations in U.S. society. Within a historical and political context, current social policies are examined in terms of their underlying assumptions and values as well as their ethical implications. Strengths and weaknesses of current policies are also analyzed. Policies under consideration include agency policies, local ordinances, state and federal legislation, and global trends.
Fulfills College Core: Ethics, Field 5 (Social Sciences)

HSV 302 Children, Schools, and the Community **3 Credits**
This course is designed to examine the contexts in which a child develops, the relationships of the people in them, and the interactions that take place within and between contexts. There is growing consensus that the needs of children and families must be understood from an integrated systems perspective (i.e., ecological systems theory). The welfare of children is highly interrelated to their families' well-being. Families, irrespective of culture or social class, cannot be separated from the broader social systems within which they are embedded. These major systems include informal support systems (e.g. friends, neighbors, and relatives) in addition to formal support systems, such as those relating to health, education, employment, religion, recreation, housing, and social welfare.

HSV 303 Research Methods in the Social Sciences **3 Credits**
Students will develop an understanding of the research process by learning how to formulate a research problem, design a study, use appropriate methods of data analysis, and interpret research findings. Students will learn how to critically analyze research studies, discuss ethical considerations in conducting research, and discuss the importance of scientific research for educational policy and practice. Each student will conduct an original research study and present their findings to demonstrate understanding of the research process.
Offered: fall.

HSV 360 People Helping Skills **3 Credits**
This course will focus on essential and successful professional people-helping skills in the field of Human Services. Basic skills such as attending, listening, empathic responding, reflecting, appropriate questioning, treatment plans, and problem management will be identified. The course is designed to be highly interactive, and students will have the opportunity to participate in discussions and practice a variety of skills.
Offered: Fall

HSV 400 Management of Human Service Agencies **3 Credits**
This course examines the fundamentals of program development and administration of human services organizations. Emphasis will be placed on program structure, planning, strategies, and evaluation. There is a growing need for human services students to be exposed to managerial and supervisory issues relative to the operation of community agencies. This course will provide students with classroom instruction and practicum experience in a community agency.

HSV 480 Wellness - Be All That You Can Be **3 Credits**
This course explores the many issues related to personal well-being. Wellness is regarded as a healthy balance between mind, body, and spirit. According to the National Wellness Institute, wellness is a process by which we actively seek to optimize ourselves occupationally, physically, socially, intellectually, spiritually, and emotionally. Approaches to wellness exist in most fields involving human services such as counseling, medicine, education, and management. Components of wellness include healthy food, clean environments, regular exercise, adequate rest, safe living conditions, productive work, balancing work and family, and spiritual awareness. What does it take to reach our potential? What are obstacles to wellness? How can wellness exist in nations that have few opportunities for healthy eating, productive work, or sanitary living conditions?.
Fulfills College Core: Core Capstone

HSV 495 Field Internship **6 Credits**
The required six-credit internship provides students with a professionally supervised field experience in a human service agency. During the internship experience, students will have the opportunity to apply theory and knowledge of the work environment and to expand their professional practice skills. Students will have the opportunity to develop client communication skills, cultural competence and will learn to infuse their practice with ethics and professionalism.

HSV 498 Practicum in Human Services **3 Credits**
Student experientially learns human service functions in compatibly matched professional setting. Faculty and on-site supervision. Pass/fail. Applications on Department website.
Prerequisite: junior or senior standing, minimum overall GPA of 2.50, minimum human services average of 2.70, & approval by department faculty.
Restriction: must be human services (HSV) major.

Professional and Technical Studies (BS)

Introduction

The Professional and Technical Studies (PTS) completion degree is designed for graduates with an Associate's degree from accredited community or technical colleges to transfer into Canisius with a total of 60 credit hours. Canisius will also accept applicants who have not completed a two-year degree. The number of transfer credits accepted will be determined on a case-to-case basis. All students will be required to fulfill the minimum of 120 credits needed to earn a bachelor's degree. The completion of the Canisius core curriculum will be required within those credit hours. The Canisius core curriculum is an interdisciplinary study of science, social science, and humanities that best represents the goals and values of a Jesuit education. The balance of the core curriculum will be free elective courses, which a student may use in multiple ways to their advantage. While completing the minimum of 120 credit hours within the core curriculum and free electives, at least 36 credit hours must be completed at the 300 – 400 course level.

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to fulfill requirements for graduation.

Advisement

All students will have access to full advisement services. Students should work closely with their advisors in discussing career expectations, choosing their electives, and developing their academic program.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

The requirements for this program are specific to a student's background, prior education, and coursework. For most students in this program, these

requirements are met by coursework in the program that they completed at another institution.

Other curricular requirements

Students must complete a minimum of 36 credits at the 300- or 400-level.

Sport Management (BS)

Co-Chairs: Nicholas Lorgnier and Shawn O'Rourke
Director: Shawn O'Rourke

Introduction

If you want to have a rewarding career in sports management, then get in the game at Canisius. The college's undergraduate program in sports administration combines sports marketing, ethics, psychology and law with the business and economics know-how that professional sports agencies crave in young candidates.

You'll learn from experienced and practicing professionals in a city with a rich sports scene. Buffalo is home to two major professional teams: the Buffalo Bills and the Buffalo Sabres. The Buffalo Bisons are the Triple-A affiliate of the New York Mets and the Buffalo Bandits are a championship National Lacrosse League team.

Graduates of the program leave with the education and real-world experience needed to become players in intercollegiate athletics, amateur and professional sports, sports marketing and management, and recreation and non-profit community organizations. More information can be found at the Sports Management website (https://www.canisius.edu/academics/programs/sport-management/). (http://www.canisius.edu/sports-mgt/)

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Sport Management.

Advisement

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Double Majors

Students who wish to expand their educational opportunities may decide to declare a double major. This decision may be based on career goals, planned graduate studies, and/or other student interests. Before a student declares a double major, it is important to meet with the appropriate academic departments for advisement. In order to declare a double major, the student must complete the appropriate double major request form and get the signature of each department chairperson and the appropriate associate dean.

Per college policy, each additional major requires a minimum of 15 credits that do not apply to the student's first or subsequent major. Some double major combinations can be completed within the minimum 120 credit hour degree requirement, but in other cases additional course work may be required. Please note that students will receive only one degree, regardless of the number of majors they complete.

Minors in Other Disciplines

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (http://catalog.canisius.edu/undergraduate/minors/) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Curriculum

An Ignatian Foundation

All undergraduate students must complete either the Canisius Core Curriculum (p. 30) or the All-College Honors Curriculum (p. 45).
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Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Business Foundation Course Requirements

Code	Title	Credits
ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ISB 101	Management Technology	3
MGT 101	Introduction to Management	3
Total Credits		18

Sport Management Course Requirements

Code	Title	Credits
SPMT 150	Introduction to Sport Management	3
SPMT 230	Sport and Recreation Law	3
SPMT 241	Practicum in Sport Management	3
SPMT 245	Technology in Sport	3
SPMT 302	Sport and Ethics	3
SPMT 304	Sport, Culture and Society	3
SPMT 320	Psychology of Sport	3
PED 351	Coaching Theory and Techniques	3
SPMT 355	Sport Operation and Planning	3
SPMT 412	Sport Marketing	3
SPMT 420	Economics and Finance in Sport Industry	3
SPMT 430	Sport Communications	3
SPMT 440	Global Perspective in Sport	3

SPMT 475	Sport Management Professional Development Seminar	3
SPMT 480	Research Methods in Sport	3
SPMT 490	Sport Management Internship	6
Total Credits		51

Arts & Sciences Course Requirements

This degree program also requires 60 hours of Arts &Sciences (non-business & non-education) courses.

Roadmap

Recommended Semester Schedule for Major Course Requirements

Freshman	
Fall	**Spring**
SPMT 150	SPMT 455
Sophomore	
Fall	**Spring**
SPMT 241	SPMT 245
ECO 101	ECO 102
MGT 101	
Junior	
Fall	**Spring**
SPMT 302	SPMT 320
SPMT 304	PED 351
ISB 101	SPMT 355
ACC 201	ACC 202
Senior	
Fall	**Spring**
SPMT 230	SPMT 420
SPMT 412	SPMT 475
SPMT 430	SPMT 480
SPMT 440	SPMT 490

Learning Goals & Objectives

Learning Goal 1 (Knowledge-Observed in Writing) Candidates in the undergraduate Sport Management programs will demonstrate content and professional knowledge necessary for successful performance in their field.

Students will:

- Demonstrate an understanding of the common principles of sport management; sport leadership; sport operations management; event and venue management; and sport governance.
- Demonstrate an understanding of the principles of finance, and the economics of sport as they fit into national and international economies.

Learning Goal 2 (Knowledge – Observed Skills and Dispositions) Candidates in the undergraduate Sport Management programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Demonstrate the ability to communicate with various public and professional audiences through written texts, oral discussions, and multi-media presentations.
- Demonstrate skill in the application of the basic principles of interpersonal and mass communications through interaction with internal and external sport publics.
- Demonstrate essential management and business related skills in the work place.
- Demonstrate skillful operation of technology and assessment related tools that may be applied to various sport management settings.

Learning Goal 3 (Service) Candidates in the undergraduate Sport Management programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Demonstrate understanding of the critical social, psychological, and philosophical base issues of the sport environment.
- Demonstrate understanding of moral and ethical implications of sport policy and strategies.

Learning Goal 4 (Professionalism) Candidates in the undergraduate Sport Management program will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Learn to ask challenging, probing questions and seek thorough, well-rounded answers.
- Act with integrity and fairness to ensure a professional system of accountability for every student's academic and social success and will model principles of self-awareness, reflective practice, transparency, and ethical behavior.

Learning Goal 5 (Leadership)
Candidates in the undergraduate Sport Management programs will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and wider community.

Students will:

- Demonstrate the ability to assume leadership roles in various professional settings and work effectively with diverse groups and organizations seeking to improve the performance of those they lead.
- Understand and can anticipate and assess emerging trends and initiatives in the sport environment.

Students might be interested minors in other programs. Common minors for Sports Management majors include:

- Coaching Minor (p. 321)

Courses

SPMT 150 Introduction to Sport Management **3 Credits**
Introduces the sport management profession. Primary focus is on the sport industry, including professional sport entertainment, amateur sport entertainment, for-profit sport participation, sport goods and sport services.
Offered: fall.

SPMT 230 Sport and Recreation Law **3 Credits**
The class will focus on the general principles of law as they apply to the today's world of sport. Class discussions will be geared toward practical application and real life examples.
Offered: spring.

SPMT 241 Practicum in Sport Management **3 Credits**
A directed practicum experience in sport industry setting. Opportunities provide for students to develop knowledge, values and beginning practice skills appropriate for entry-level positions.
Offered: fall.

SPMT 245 Technology in Sport **3 Credits**
This course is an introduction to technology in sport. The course is designed to provide students with experience in integrating technology into sport.
Offered: spring.

SPMT 302 Sport and Ethics **3 Credits**
Will assist you in establishing a fundamental philosophy for sport in your life (both personal as well as professional). Questions that will be addressed in class are why you are/ want to be involved in sports in a professional capacity; what values drive your actions/decisions.
Fulfills College Core: Ethics
Offered: fall.

SPMT 304 Sport, Culture and Society **3 Credits**
This course will focus upon important, enduring issues within the sociology of sport in addition to a few controversial issues currently under debate.
Offered: fall.

SPMT 320 Psychology of Sport **3 Credits**
This course will review the major social/psychological theories utilized in current sport psychology research.
Fulfills College Core: Field 5 (Social Sciences)
Offered: spring.

SPMT 355 Sport Operation and Planning **3 Credits**
This course is designed to provide learning experiences in the administrative tasks of planning new athletic facilities, renovating older facilities and maintaining existing sport facilities. Management principles and concepts as they affect facilities will also be examined.
Offered: spring.

SPMT 361 Guest Service Professional **3 Credits**
This course provides guidelines and best practices for providing excellent customer service that will enable frontline associates and service staff in back-up and support roles to build, maintain, and increase a loyal customer base in professional sport.

SPMT 412 Sport Marketing **3 Credits**
This course investigates principles and processes in sport marketing and sales. Focuses on research and development, sport promotion, sport sponsorship, advertising, merchandising, and distribution of sporting goods.
Offered: fall.

SPMT 420 Economics and Finance in Sport Industry **3 Credits**
This course is a survey examination of principles of economics, budgeting, and finance as it applies to the sport industry.
Offered: spring.

SPMT 430 Sport Communications **3 Credits**
This course provides a senior-level exploration of the role of sport communication in contemporary cultures.
Fulfills College Core: Oral Communication
Offered: fall.

SPMT 440 Global Perspective in Sport **3 Credits**
Is an interdisciplinary examination of sport as a global phenomenon. Historical, cultural, economic, and governance perspectives are considered. Examine the global sporting experience from the 19th century to the present.
Fulfills College Core: Global Awareness
Offered: fall.

SPMT 455 Governance and Policy in Sport Organizations **3 Credits**
This course is an examination of sport organizations focused on both professional and amateur governance structures and processes. The study of policy in educational, non-profit, professional and international sport venues will also be addressed.
Offered: fall.

SPMT 475 Sport Management Professional Development Seminar **3 Credits**
To prepare the student for the process of seeking a job as well as being successful in a job in the sports management field. This is a seminar format in which students synthesize and apply theories, concepts, and practices in the leadership and management of sport organizations.
Offered: spring.

SPMT 480 Research Methods in Sport **3 Credits**
Covers the development of empirical research designs for both practical and theoretical problems in sport management. Includes literature review of hypothesized relationships, and formulation of research proposals.
Fulfills College Core: Advanced Writing-Intensive
Offered: spring.

SPMT 490 Sport Management Internship **3-6 Credits**
This supervised professional experience provides a continuous and structured opportunity to apply principles and skills developed in the classroom to the solution of practical problems in a sport industry setting.
Offered: spring.

Sports and Exercise Health Care (BS)

The Department of Kinesiology offers a new **Bachelor of Science degree in Sports and Exercise Health Care**. This degree is designed to provide an introductory education and experience for those looking to pursue careers in the allied health fields (chiropractic care, physical therapy, physician assistant, occupational therapy, nursing and athletic training). The **Sports and Exercise Health Care** program includes 54 major credits (three laboratory credits included), 54 core curriculum credits and 18 credits of electives. Between the major and elective courses, students will be able to complete prerequisites for application to allied health care and medical graduate schools.

Curriculum

Code	Title	Credits
ATH 398	Statistics and Research Design	3
BIO 114	Human Biology: Introduction to Human Anatomy and Physiology	3
BIO 114L	Human Biology: Introduction to Human Anatomy and Physiology Laboratory	1
BIO 115	Musculoskeletal Anatomy and Physiology	3
BIO 115L	Musculoskeletal Anatomy and Physiology Laboratory	1
HED 115	Basic Nutrition	3
HED 205	Wellness and Fitness	3
HED 220	Healthy Behaviors	3
KIN 170	Emergency Care	3
KIN 200	Athletic Taping and Bracing	3
KIN 235	Kinesiology	3
KIN 261	Injury/Illness Evaluation Techniques	3
KIN 301	General Medicine Seminar	3
KIN 342	Therapeutic Exercise & Modalities	3
KIN 336	Physiology of Exercise	3
KIN 336L	Physiology of Exercise Lab	1
KIN 401	Practicum in Sport & Exercise Health Care	3
KIN 498	Internship in Health and Wellness	6
PSY 101	Introduction to Psychology I	3
Total Credits		54

Roadmap

Freshman

Fall	Spring
ENG 111	ENG 112
PHI 101	RST 101
BIO 114 & 114L	BIO 115 & 115L
Field 6	KIN 170
HED 205	Field 1
PSY 101	

Sophomore

Fall	Spring
KIN 200	KIN 261
KIN 235	ATH 398
HED 220	Field 3
Elective	Elective
Field 2	Elective

Junior

Fall	Spring
KIN 342	KIN 301
HED 115	Elective
Elective	Field 5
Field 4	Diversity Course
Ethics Course	Global Awareness Course

Senior

Fall	Spring
KIN 401	KIN 336 & 336L
Oral Communications	KIN 498
Advanced Writing	Core Capstone
Justice Course	Elective
Elective	

Learning Goals & Objectives

The Sports and Exercise Care program will follow the assessment plan as set forth in the School of Education and Human Services (SEHS) Assessment Manual. Five broad learning goals have been established for all SEHS programs. They are:

Learning Goal 1: Candidates in SEHS programs will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Learning Goal 2: Candidates in SEHS programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Learning Goal 3: Candidates in SEHS programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Learning Goal 4: Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Learning Goal 5: Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Student Affairs

Our Mission

The division of Student Affairs at Canisius College intentionally cultivates an environment where students are expected to be attentive to their experiences, reflect upon the meaning of those experiences, and develop a lifelong habit of discernment in order to encourage purposeful action.

Our Values

The values of the Student Affairs division at Canisius College are consistent with those stated in the College's Strategic Plan, and we emphasize the following values:

- Diversity and inclusivity
- Care and respect for every person
- Spiritual development
- Healthy lifestyle
- Teamwork
- Collegiality
- Kindness
- Humor

The vice president for student affairs determines all student affairs policies and procedures for the college, subject to the approval of the president.

Assistance to students is provided by the following offices within the division of student affairs:

- ALANA (African American, Latino/a, Native American, Asian American) Student Center (p. 339)
- Athletics — Division I Intercollegiate (p. 339)
- Campus Ministry (p. 339)
- Counseling Center (p. 339)
- The Griff Center for Academic Engagement (p. 340)
- International Student Programs (p. 340)
- Public Safety (p. 340)
- Student Health Center (p. 340)
- Study Abroad Programs (p. 341)

Student Life

- Student Involvement (p. 341)
- Club Sports and Intramurals (p. 341)
- New Student Orientation (p. 342)
- Office of Event Services (p. 342)
- Housing (p. 342)

ALANA Student Center

(ALANA = African American, Latino/a American, Asian American, Native American students) A genuine, pluralistic campus fosters respect, equality and understanding of a mosaic of cultural heritages. Such a campus recognizes the interdependence of cross-cultural student communities and the integrity of each individual. The college aims for all individuals to feel a sense of inclusion in the college's mission and activities, particularly those who have been historically marginalized in America primarily due to the color of their skin.

The ALANA Student Center (https://www.canisius.edu/student-experience/student-support-services/alana-student-center/) assists the college in providing services for ALANA students while educating the entire student population about ALANA cultural patterns and trends in higher education. The staff assists students concerning racial perspectives, self-concept issues and participatory involvement within the framework of the campus.

Although primarily co-curricular focused, the ALANA Student Center also serves students as a referral and support unit with respect to other collegiate matters. The Center provides a place for students to share and discuss cross-cultural experiences and to interpret those experiences. By way of this service, and other support services campus-wide, Canisius College provides students with tools essential for their success in school and in the greater community.

Athletics

Canisius College conducts an extensive NCAA Division I athletics program for both men and women and is a member of the Metro Atlantic Athletic Conference and the Atlantic Hockey Conference.

Men's Sports

- Baseball
- Basketball
- Cross-country/indoor/outdoor track
- Golf
- Ice hockey
- Lacrosse
- Soccer
- Swimming and diving

Women's Sports

- Basketball
- Cross-country/indoor/outdoor track
- Lacrosse
- Rowing
- Soccer
- Softball
- Swimming and diving
- Volleyball

Campus Ministry

Campus Ministry (https://www.canisius.edu/faith-and-service/campus-ministry/) supports the spiritual and religious life of the campus with activities open to students and staff of all faiths. Campus Ministry seeks to empower students, faculty, administrators, staff and alumni as persons of faith "for and with others" in the Catholic, Jesuit tradition.

In addition to providing for a vital Roman Catholic liturgical and sacramental life, the campus ministry team:

- offers opportunities for spiritual retreats
- organizes opportunities for prayer and small faith communities
- promotes opportunities for service to those in need, both locally and through domestic and international service immersion trips
- promotes ethical values and educates and organizes around issues of social justice and peace
- provides pastoral counseling and spiritual direction

COUNSELING CENTER

The Counseling Center (https://www.canisius.edu/student-experience/student-support-services/counseling-center/)is committed to developing the personal and academic potential of Canisius College students by providing comprehensive counseling services and outreach education to support the emotional and mental health of our students. Professional counseling services are available to all registered students, at no additional cost, to address concerns that may interfere with a student's academic success and personal growth. In addition to individual and group counseling, counselors are available during and after college business hours for crisis

intervention and mental health emergencies. Counselors are also available for consultation and referrals to community resources.

Students who access counseling services are assured confidentiality, unless it is apparent that a student may do harm to others. A student's privacy and confidentiality are carefully guarded and protected. No information about participation in counseling becomes part of any official record. Students may schedule appointments by calling the Counseling Center at 716-888-2620. Appointments may also be scheduled in person. The Counseling Center is located in Bosch Hall Room 105, directly off the lobby of Bosch Hall. Enter via the quad side entrance of Bosch. The Counseling Center offers many educational programs and workshops throughout the academic year for the Canisius College community. Refer to the Counseling Center website for the most current information on programs and services, including online screening programs and self-help information.

THE GRIFF CENTER FOR Student Success

The Griff Center (https://www.canisius.edu/student-experience/student-support-services/griff-center/)represents a collaboration between the Office of Academic Affairs and the Office of Student Affairs. A complete description of the Griff Center and the programs and experiences it provides are available in the Griff Center section of the catalog (p. 76), which is published in the academics section of catalog.

INTERNATIONAL STUDENT PROGRAMS

Whether you are an international student who will study on an F-1 student visa, a visiting student who will be studying abroad for one semester, or an incoming student who did not grow up in the United States, the Office of International Student Programs (https://www.canisius.edu/global-education/international-student-programs/) is here to support you. The Office of International Student Programs (ISP) at Canisius College supports the needs and development of the global student community through advisement and cultural support, in order to assist them in achieving their academic, personal, and professional goals. Other services for international students include an extensive orientation for new students, assistance understanding immigration regulations and workshops on practical training benefits. Global Horizons, a student organization for American and international students, plans additional activities to promote cultural awareness on campus. An example of this is Global Fest, an annual event celebrating different cultures through food tasting, music, performances and crafts from around the world! International students are required to complete an online semester SEVIS registration form at the start of each semester. This form ensures that ISP properly registers them for the semester in the SEVIS (Student Exchange and Visitor Information System). All international students studying on an F-1 or J-1 visa are required by the college to purchase a health insurance plan offered by Canisius College. This plan is designed and written specifically for the health care needs of international students studying in the United States. Information about the required health insurance plan is available in the Office of International Student Programs.

PUBLIC SAFETY

The Department of Public Safety, located in the basement of the Bosch Residence Hall, is open 24 hours a day, providing around the clock protection and services to the campus community. The department was established to protect the educational environment of Canisius College, keeping the environment free from the threat of physical harm, property damage and disruptive activity. Departmental objectives include aiding in the enforcement of federal, state and local laws; preventing crime; regulating non-criminal conduct and preserving the peace. Uniformed Public Safety Officers, all of whom are sworn peace officers, are on duty 24 hours a day, seven days a week, 365 days a year. Their primary responsibilities include patrolling the campus area on foot, on bicycles and in vehicles; security services; emergency response; and requests for assistance involving members of the campus community.

Public Safety also provides a variety of support services that are tailored to meet the needs of the campus community. These services include conducting crime prevention and personal safety programs, dispatching the campus shuttle system, providing Canisius ID cards, and providing assistance to campus motorists experiencing minor mechanical problems.

For a comprehensive summary of the activities and services provided by Public Safety, visit the Department of Public Safety website (https://www.canisius.edu/student-experience/student-support-services/public-safety/).

Crime Statistics

Canisius College complies with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act by providing available information on campus security and personal safety. This information includes crime prevention, public safety, law-enforcement authority, crime reporting policies, disciplinary procedures and other important matters regarding campus security. Statistics are available from the three previous calendar years on reported crimes that occurred on campus, in certain off-campus buildings or property owned or controlled by Canisius College, and on public property within or immediately adjacent to and accessible from the campus. Upon request, the Canisius College Advisory Committee on Campus Safety will provide all campus crime statistics as reported to the United States Department of Education. This information is available on the Public Safety we (https://www.canisius.edu/student-experience/student-support-services/public-safety/)bsite (http://www.canisius.edu/campus-life/public-safety/policy-laws-stats/). A printed copy may be obtained by calling the office of student affairs at 716-888-2130.

STUDENT HEALTH CENTER

The Student Health Center (https://www.canisius.edu/student-experience/student-support-services/student-health/) staff strives to provide high-quality care that is easy to access, individualized and designed to treat common sicknesses and injuries that slow down healthy college students. Staffed by doctors, a nurse practitioner and registered nurses, each visit offers an opportunity to feel better and to learn to optimize good health for success in college and beyond.

Appointments are not required but strongly encouraged. Students can schedule an appointment 24/7 online at myCanisiusHealth, by phone or by walking in to Student Health.

MyCanisiusHealth is a web based confidential health portal which allows students 24/7 access to schedule a Health Center appointment, locate health information and health care resources both on and off campus and receive confidential messages from Student Health medical staff. A link to myCanisiusHealth is located on the student portal page, under student services.

When Student Health is closed, students can visit one of the urgent care centers in Western New York.A list of those centers is located on myCanisiusHealth. In the event of a medical emergency on campus, students should contact Public Safety or dial 911.

Student Health does not write medical notes for missed classes or work. Health Center appointment verifications are sent via college email from noreply@medicat each evening. Student Health recommends students share the email verification notice with faculty or employers if proof of a doctor's appointment is needed.

The Student Health Center web site (https://www.canisius.edu/student-experience/student-support-services/student-health/) provides detailed information about Student Health services, hours, staff, location, health requirements, health insurance, medical notes and more.

Health Insurance

Canisius College recommends all students have health insurance to ease the fiscal burden associated with sickness or injury. Students needing health insurance, who are US citizens, should visit www.healthcare.gov (http://www.healthcare.gov/)

International students, studying on a F1 Visa, are required to purchase the international health insurance plan designed specifically for them. Information about the international student plan can be found at the Student Health Center web site.

Immunization Requirements for Class Attendance

Measles, Mumps, Rubella

New York State law requires all students taking six or more credits, attending any classes on campus, and born on or after January 1, 1957 to provide proof of immunity against measles, mumps and rubella to the Student Health Center prior to class attendance. Students must submit proof of two doses of measles (rubeola) vaccine, one dose of rubella (German measles) vaccine and one dose of mumps vaccine, given on or after their first birthday and after 1967.

Meningitis Requirement

All students registered for 6 or more credits and attending class on campus, regardless of birth date, are required to receive information about the risk of meningococcal disease and the benefit of vaccination. Students are required to read the information and either obtain the meningitis vaccine or sign a vaccine refusal statement within thirty days of first class attendance.

Submission Dates and Non-Compliance

Immunization records, must be submitted by July 31 for fall attendance and January 1 for spring attendance. Summer students must submit records before their first day of class. Non-compliance with health requirements results in registration withdrawal, removal from college housing, and inability to register with the college for future semesters. If registration is withdrawn, a student will be reinstated once the health forms are submitted and deemed complete. Canisius College charges an immunization reinstatement fee. To view the fee click here https://www.canisius.edu/tuition-aid/student-records-and-financial-services/cost-attendance (https://www.canisius.edu/tuition-aid/student-records-and-financial-services/cost-attendance/). Compliance with New York State health requirements is strictly enforced across the campus.

Students taking online courses only are generally exempt from these requirements, however some online programs have established stricter immunization requirements. On line students should discuss health requirements with Admissions or their program directors.

The Student Health Center website (https://www.canisius.edu/student-experience/student-support-services/student-health/) has detailed information about health requirements and links to the required forms.

STUDY ABROAD PROGRAMS

Canisius College students who study abroad say it is a life-changing experience which significantly expands their personal and professional horizons. The college offers diverse study abroad opportunities in 13 countries and 21 cities. While several Canisius majors require an international experience, students of all majors should consider study abroad.

Students who study abroad:

- Get jobs. They acquire marketable skills which are sought by potential employers in this global economy. According to an article in the Huffington Post, four out of five business leaders say that if similar candidates were before them and one had study abroad experience and one didn't, they'd almost always hire the one with study abroad experience.
- Become more fluent in a foreign language when they immerse themselves in the culture and live among native speakers (however, many locations have no language requirement).
- Develop valuable life skills such as independence, flexibility, cross-cultural awareness/communication and problem-solving.
- Enhance their knowledge of global relations and deepen their knowledge of cultural and societal differences.
- Travel and meet new people and gain confidence.

Additional information about Study Abroad and other international experiences is available at the Global Education website (https://www.canisius.edu/global-education/).

STUDENT LIFE (student Involvement)

Campus Programming encourages and promotes involvement and enhances student learning through co-curricular programming opportunities. To help achieve this mission, Campus Programming allows students the opportunity to get involved on campus. Students may choose from a variety of clubs and organizations (https://www.canisius.edu/student-experience/student-life-and-housing/student-involvement/clubs-and-organizations/), including the Undergraduate Student Association (USA) (https://www.canisius.edu/student-experience/student-affairs/student-life-and-housing/student-involvement/undergraduate/) which is comprised of the entire student body and is represented by an elected group, the Student Senate. The purpose of the Senate is to assist, finance and integrate all student organizations and to represent the views of the student body to the college administration. The Commuter Student Association (CSA) (https://www.canisius.edu/student-experience/student-life-and-housing/commuter-students/) represents all of the commuter students, and the Residence Hall Association (RHA) is the student governing body for the resident students at Canisius. Additionally, there are over 90 student clubs and organizations at Canisius. These organizations provide students with an opportunity to explore an academic subject informally yet deeply, gain familiarity with the arts or with differing cultures, provide service to the college or to the community, develop a wide range of leadership skills, or simply socialize with other students. Various honor societies give recognition to student excellence in numerous areas, and the student-run media on campus, such as the college newspaper (The Griffin) and the campus radio station (WCCG), provide students with opportunities to explore communications media while keeping the college community informed and entertained.

Club Sports and Intramurals

The currently active club sports (https://www.canisius.edu/student-experience/sports-athletic-facilities/club-sports/) are listed below. Additional club sports can be added based on student interest. Club

sports are played at a more competitive level than intramurals (https://www.canisius.edu/student-experience/sports-athletic-facilities/intramurals/) and often involve team travel. Students are responsible for additional fees associated with most club sports.

Co-ed club sports

- Bowling
- Cheerleading and Dance
- IHSA (Equestrian)
- Mixed Martial Arts
- Rifle
- Tennis
- Ultimate Frisbee

Men's club sports

- Men's Rugby
- Men's Soccer
- Men's Volleyball
- Men's Ice Hockey
- Men's Crew
- Men's Baseball
- Men's Golf

Women's club sports

- Women's Soccer
- Women's Volleyball
- Women's Rugby

Intramurals

All intramural sports are currently co-ed and provide an opportunity for students to engage recreationally for fun, health, and wellness. Current intramural sports:

- Basketball-open
- Volleyball
- Floor Hockey
- Indoor Soccer
- Outdoor Soccer
- Flag Football
- Dodgeball
- Whiffle ball

NEW STUDENT ORIENTATION

New Student Orientation is the beginning of the journey for new students that provide a welcoming, informative, and incredibly fun start to their academic careers at Canisius. The program highlights a variety of academic supports and campus resources through informational sessions and activities.

OFFICE OF EVENT SERVICES

Members of the Canisius Community or the public looking to reserve non-classroom space (including athletic facilities) for meetings and events should contact the Office of Event Services. Office staff will assist with room selection, securing appropriate technology, and facilitating connections with Chartwells food service when requested.

STUDENT LIFE (housing)

Student Life promotes the personal growth of resident students as they adjust to college life and interact with others in the residence halls and the college community.

Canisius College believes that the experience of living on-campus contributes to the development of a well-rounded individual. Student Life creates an environment where students can live, learn and develop leadership skills, and become men and women for and with others.

There are several housing options available to resident students. Bosch and Frisch halls are traditional residence halls for freshman students. They include double rooms, suites and social lounges with kitchens and lounges on each floor. Dugan Hall, our newest traditional residence hall for sophomore students includes suites and social lounges with kitchens on alternate floors. The Delavan Townhouses, built in 2002, feature one-, two-, three-, four-, and five-person apartments with single-person bedrooms. These apartments also have living rooms, kitchens, bathrooms and air conditioning. The Village Townhouses feature two and five person apartments. These apartments are equipped with some single and double bedrooms, kitchens bathrooms, and air conditioning. Additional information including virtual tours, pictures, floor plans, cost and the application process can be found on the Student Life webpages (https://www.canisius.edu/student-experience/student-life-and-housing/).

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* Bene Merenti — awarded for 20 years of service to Canisius College.

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* Bene Merenti - awarded for 20 years of service to Canisius College.

** Special Bene Merenti - awarded for 40 years of Service to Canisius College.

Campus Map

Desmond Hall & Demerly Hall
See inset
Inset
Desmond Hall (FF) & Demerly Hall (R)
To main campus
Canisius
CLASSROOMS & ADMINISTRATION BUILDINGS
A Bagen Administration Building
B Old Main
C Bouwhuis Library
D Churchill Academic Tower
E Wehle Technology Center
F Loyola Hall (Jesuit residence)
G Horan-O'Donnell Science Building
H Christ the King Chapel
I Richard E. Winter '42 Student Center
J Palisano Pavilion
K Lyons Hall
L Montante Cultural Center
M Health Science Building
N Demske Sports Complex
O Koessler Athletic Center
P Patrick Lee Student Athletic Center
Q Science Hall
R Demerly Hall
S College Relations Division
CAMPUS HOUSING
AA Bosch Residence Hall
BB Frisch Residence Hall
CC Martin Hall
DD Griffin Hall
EE Campion Residence Hall
FF Desmond Hall
GG Village Townhouses
HH Main-Humboldt Townhouses
II Delavan Townhouses
JJ Main-Delavan Townhouses
KK Dugan Residence Hall
CAMPUS PARKING
1 Tower Lot
2 Old Main Lot
3 Main-Eastwood Lot
4 Loyola Lot
5 Eastwood Lot
6 Loring Lot
7 Lyons Hall - Lot 1
8 Lyons Hall - Lot 2
9 Lyons Hall - Lot 3
10 Village Townhouse - Lot 1
11 Village Townhouse - Lot 2
12 Village Townhouse - Lot 3
13 LBJ Lot
14 Main-Humboldt Lot
15 Main-Jefferson Lot
16 Science Hall Parking
17 Health Science Lot
18 Upper KAC Lot
19 Lower KAC Lot
20 Spillman - Lot 1
21 Spillman - Lot 2
22 Main-Delavan Lot
23 Delavan Townhouse Lot
24 Demerly Lot
25 Lyons Hall - Lot 4
26 Science Hall Main Street Parking
AAA Auxiliary - Lot 1
BBB Auxiliary - Lot 2
CCC Rear Health Science Lot
Metro Rail Stations
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