

Canisius College

UNDERGRADUATE CATALOG

2015-2017



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ACADEMIC CALENDAR

FALL 2015

August 2015

- 24 Monday New Faculty Orientation.
- 31 Monday Classes begin in all divisions.
First day to apply for a course pass/fail.

September 2015

- 1 Tuesday Deadline for submitting Core Curriculum proposals for inclusion in spring.
2016 schedule.
- 4 Friday Last day to apply for a course pass/fail.
- 5 Saturday Last day to drop/add a class.
Graduate Education classes in session.
- 7 Monday Labor Day – No classes.
- 8 Tuesday Withdrawal from classes begins.
90% withdrawal refund.
First Student Health warnings for students not in compliance.
- 15 Tuesday 50% withdrawal refund.
Second Student Health warnings for students not in compliance.
- 18 Friday Spring 2016 schedule and advisement guide information to department chairs and program directors.
- 22 Tuesday 50% withdrawal refund.
Third Student Health warnings for students not in compliance.
- 28 Monday Spring 2016 schedules due to associate deans.
- 29 Tuesday 25% withdrawal refund.
Student Health registration cancellations for students not in compliance.
- 30 Wednesday faculty Progress Report submission begins.

October 2015

- 6 Tuesday 25% withdrawal refund.
- 7 Wednesday Faculty Progress Report submission ends.
- 8 Thursday Email to designated students regarding Progress Reports.
- 9 Friday Student Progress Report meetings with advisors begin.
- 10 Saturday Graduate Education classes in session.
- 12 Monday Fall Holiday – No classes.
Graduate Business classes in session.
- 13 Tuesday Fall Holiday – No classes.
25% withdrawal refund.
- 16 Friday End of first quarter.
Spring 2016 schedule and advisement guide available in *myCanisius*.
- 20 Tuesday 25% withdrawal refund.
- 23 Friday Professional Studies Session One ends.
Student Progress Report meetings end.
- 26 Monday Professional Studies Session Two begins.
- 27 Tuesday No withdrawal refund.
- 28 Wednesday Professional Studies Session One grades due.
- 30 Friday Student Progress Report meetings with advisors end.
- 31 Saturday Spring 2016 undergraduate registration begins.
Students with 84.0 or more completed credit hours begin to register.
Drop/Add ends for Professional Studies Session Two.

November 2015

- 2 Monday Spring 2016 graduate registration begins.
- 3 Tuesday First Student Health warnings for students not in compliance in Professional Studies Session Two.
- 4 Wednesday Faculty Deficiency Report submission begins.
Deficiency reporting begins in *myCanisius*.
- 7 Saturday Spring 2016 undergraduate registration.
Students with 54.0 – 83.0 completed credit hours begin to register.
- 10 Tuesday Second Student Health warnings for students not in compliance in Professional Studies Session Two.
- 11 Wednesday Veterans' Day – Classes in session.
Faculty Deficiency Report submission ends.
Deficiency reporting ends.
- 12 Thursday Email to designated students regarding Deficiency Reports.
- 14 Saturday Spring 2016 undergraduate registration.
Students with 24.0 – 53.0 completed credit hours begin to register.
- 17 Tuesday Third Student Health warnings for students not in compliance in Professional Studies Session Two.
- 20 Friday Summer 2016 schedule information to department chairs and program directors.
Last day to withdraw from a course.
- 21 Saturday Spring 2016 undergraduate registration.
Students with 0.0 – 23.0 completed credit hours begin to register.
- 24 Tuesday Student Health registration cancellations for students not in compliance in Professional Studies Session Two.

- 25 Wednesday Thanksgiving Recess begins. No classes.
- 26 Thursday Thanksgiving.
- 27 Friday No classes.
- 28 Saturday No classes.
- 30 Monday Classes resume.

December 2015

- 7 Monday First day to withdraw from pass/fail program.
Deadline for submitting Core Curriculum proposals for inclusion in summer 2016 schedule.
- 11 Friday Undergraduate classes end.
Last day to withdraw from pass/fail program.
- 12 Saturday Graduate classes end.
- 14 Monday Final Exams begin.
Final grade entry available in *myCanisius*.
- 18 Friday Undergraduate Final Exams end.
- 19 Saturday Graduate Final Exams end.
- 23 Wednesday Final grades due 9:00 a.m.
Final grade entry off.
- 24 Thursday Final grades available in *myCanisius*.
- 24 Tuesday College holiday shutdown begins.

SPRING 2016

January 2016

- 4 Thursday College reopens after holiday shutdown.
- 18 Monday Martin Luther King Day – No classes.
- 19 Tuesday Classes begin in all divisions.
First day to apply for a course pass/fail.
- 25 Monday Last day to drop/add a class.
Last day to apply for a course pass/fail.
- 26 Tuesday Withdrawal from classes begins.
90% withdrawal refund.
- 27 Wednesday First Student Health warnings for students not in compliance.

February 2016

- 1 Monday Deadline for submitting Core Curriculum course proposals for inclusion in fall 2016 course schedule.
- 2 Tuesday 50% withdrawal refund.
- 3 Wednesday Second Student Health warnings for students not in compliance.
- 5 Friday Summer 2016 schedule due in Student Records and Financial Services.
Fall 2016 schedule and advisement guide information to department chairs and program directors.
- 9 Tuesday 50% withdrawal refund.
- 10 Wednesday Third Student Health warnings for students not in compliance.
- 13 Saturday Graduate Education classes in session.
- 15 Monday President's Day holiday – No classes.
Graduate Business classes in session.
- 16 Tuesday President's Day holiday – No classes.
25% withdrawal refund.
- 17 Wednesday Faculty Progress Report submission begins.

- 17 Wednesday Student Health registration cancellations for students not in compliance.
- 19 Friday Fall 2016 schedule due to associate deans.
- 23 Tuesday 25% withdrawal refund.
- 24 Wednesday Faculty Progress Report ends.
- 25 Thursday Email to designated students regarding Progress Reports.
- 26 Friday Progress Meetings begin.

March 2016

- 1 Tuesday Summer 2016 schedule available in *myCanisius*.
25% withdrawal refund.
- 4 Friday End of third quarter.
- 8 Tuesday 25% withdrawal refund.
- 11 Friday Professional Studies Session One ends.
Fall 2016 schedule and advisement guide available in *myCanisius*.
Progress Meetings end.
- 14 Monday Professional Studies Session Two begins.
Summer 2016 undergraduate and graduate registration begins.
- 15 Tuesday No withdrawal refund.
First Student Health warnings for students not in compliance in Professional Studies Session Two.
- 16 Wednesday Professional Studies Session One grades due.
- 18 Friday Student Progress Report meetings with advisors end.
- 19 Saturday Drop/add ends for Professional Studies Session Two.
- 22 Tuesday Second Student Health warnings for students not in compliance in Professional Studies Session Two.
- 23 Wednesday Faculty Deficiency Report Submission begins.

24 Thursday Easter/Spring Recess begins – No classes.

29 Tuesday Third Student Health warnings for students not in compliance in Professional Studies Session Two.

April 2016

4 Monday Classes resume.

5 Tuesday Student Health registration cancellations for students not in compliance in Professional Studies Session Two.

6 Wednesday Faculty Deficiency Report Submission ends.

7 Thursday Email to designated students regarding Deficiency Reports.

9 Saturday Fall 2016 undergraduate registration begins.
Students with 72 or more completed credit hours begin to register.

11 Monday Fall 2016 graduate registration begins.

15 Friday Last Day to Withdraw from a course.
Ignatian Scholarship Day.

16 Saturday Fall 2016 undergraduate registration.
Students with 42.0 – 71.0 completed credit hours begin to register.

23 Saturday Fall 2016 undergraduate registration.
Students with 0.0 – 41.0 completed credit hours begin to register.

May 2016

2 Monday First day to withdraw from pass/fail.

6 Friday Undergraduate classes end.
Last day to withdraw from pass/fail.

7 Saturday Graduate classes end.

9 Monday Final exams begin.
Final grade entry available in *myCanisius*.

13 Friday Undergraduate final exams end.

14 Saturday Graduate final exams end.

18 Wednesday Final grades due 9:00 a.m.
Final grade entry off.
Graduate Commencement Ceremony.

19 Thursday Final grades available in *myCanisius*.

20 Friday Spring Honors Convocation.
Baccalaureate Mass.

21 Saturday Undergraduate Commencement Ceremonies.

23 Monday First Summer Sessions begin.
5 week Undergraduate, Graduate Education, Communication and Leadership sessions begin.
6 week Graduate Business and Professional Studies sessions begin.

30 Monday Memorial Day – No classes.

31 Tuesday First Student Health warning for students not in compliance in the first summer session.

June 2016

3 Friday Graduate Business make-up session for Memorial Day.

7 Tuesday Second Student Health warning for students not in compliance in the first summer session.

14 Tuesday Third Student Health warning for students not in compliance in the first summer session.

21 Tuesday Student Health registration holds placed for students not in compliance in the first summer session.

23 Thursday First 5 week undergraduate, Graduate Education and Communication and Leadership sessions end.
Online grading available in *myCanisius*.

- 27 Monday Second Summer sessions begin.
5 week Undergraduate, Graduate Education, Communication and Leadership sessions begin.
- 29 Wednesday First 5 week session final grades due.
- 30 Thursday First 6 week Graduate Business and Professional Studies sessions end.

July 2016

- 4 Monday Fourth of July holiday – No classes.
- 5 Tuesday Second 6 week Graduate Business and Professional Studies sessions begin.

First Student Health warning for students not in compliance in the second summer session.
- 6 Wednesday First Graduate Business and Professional Studies session grades due.
- 8 Friday Graduate Business make-up session for Fourth of July holiday.
- 12 Tuesday Second Student Health warning for students not in compliance in the second summer session.
- 19 Tuesday Third Student Health warning for students not in compliance in the second summer session.
- 26 Tuesday Student Health registration holds placed for students not in compliance in the second summer session.
- 28 Thursday Second 5 week Undergraduate, Graduate Education, Communication and Leadership sessions end.

Online grading available in *myCanisius*.

August 2016

- 3 Wednesday Second 5 week session final grades due.
- 11 Thursday Second 6 week Graduate Business and Professional Studies sessions end.
- 15 Monday Fall 2016 registration cancellations for students not in compliance with health regulations during the summer sessions.
- 17 Wednesday Second Graduate Business and Professional Studies session grades due.
- 22 Monday Last day to submit final grades for any summer course.

Online grading turned off.

The fall 2016 through summer 2017 Academic Calendar is not available.

GENERAL INFORMATION

The College and Its 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. The key concepts:

Catholic

Canisius is an open, welcoming university where our Catholic faith and traditions are vitally present and operative. Rooted in the Catholic intellectual tradition, Canisius cultivates human knowledge for the benefit of Church and society.

Jesuit

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 and service to humanity. 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 and 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 the 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.

Leadership

Benefitting from academically rich, values-based experiences in their interactions with faculty, staff, and community, students learn responsible leadership and develop their ability to inspire others to achieve excellence. At Canisius, students practice these leadership skills in the classroom and through co-curricular activities.

A Vision for the Future

Canisius College will be an outstanding Catholic and Jesuit university that provides its students an exceptional education in a dynamic urban setting. 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.

As an urban college, Canisius enjoys a special relationship with the city of Buffalo and the Western New York region. The concept of community service on which the college prides itself is best evidenced by the large number of Canisius graduates who have occupied important positions in the professional, educational, commercial and political life of the city and its surrounding communities. Buffalo's largest private college is named after Saint Peter Canisius, a 16th-century Dutch scholar. The college's founders were guided by the same educational ideals which inspired several European universities and initiated a tradition of service to student and community.

Starting out in 1870 as a single building in the center of downtown Buffalo, Canisius College has since expanded to cover the more than 72 acres and 36 academic buildings on its campus on Main Street. It is easily accessible by expressway, subway and bus routes.

In addition to the College of Arts and Sciences, Canisius includes the Richard J. Wehle School of Business, the School of Education and Human Services, a Graduate Division and a Summer Session, with a total enrollment for 2013 of nearly 5,000 students.

Canisius College is governed by an independent self-perpetuating Board of Trustees under a charter granted by the Board of Regents of the University of the State of New York.

The Faculty

The college seeks faculty members known to be creative and energetic teachers who also seek to engage their students in their research and scholarship. Modest class size is the norm, and interaction among students and faculty is easy and natural.

Canisius' full time faculty members have degrees from over 100 different universities, including 27 degrees from Europe, ten from Asia/Pacific, 16 from Canada and two from South America. Each of the 225 full-time faculty members has been chosen for his or her academic competence, ability to teach, interest in research and moral integrity. The college's present faculty is a group of highly trained, dedicated individuals who take a personal interest in the students under their charge. Over 96 percent have earned doctoral or terminal degrees in their fields.

Over 290 individuals from the fields of law, health care, education, business, government, science, technology and the arts contribute as part time faculty members to the mission of Canisius College.

Accreditation

Canisius College received its authority to confer bachelor's degrees in 1883 when it was incorporated by the Regents of the University of the State of New York. In 1894, the college offered its first course in the graduate program leading to the degree of master of arts.

Canisius College is an accredited member of the Middle States Association Commission on Higher Education¹. All of the college's programs are registered by the Regents of the University of the State of New York through the State Education Department². The undergraduate programs in Business Administration and the MBA program are accredited by the Association to Advance Collegiate Schools of Business International³. The chemistry major is accredited by the American Chemical Society⁴, and the athletic training major by the Commission on Accreditation of Allied Health Education Programs⁵. The programs of the School of Education and Human Services designed to prepare students for school-based careers are accredited by the National Council for Accreditation of Teacher Education⁶. The Graduate Program for Teachers of the Deaf is accredited by the Council on the Education of the Deaf.⁷

The Graduate Programs in Counseling are accredited by the Council for the Accreditation of Counseling and Related Educational Programs.⁸

The Andrew L. Bouwhuis 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.

The ALB Library has evolved into a learning commons to better accommodate collaborative learning styles and to provide additional support for student learning. The Library has a variety of study and workspaces; a Curriculum Materials Center for K-12 teacher training; reservable group workrooms; audio-visual areas to practice presentations; and a Tim Hortons coffee shop. Canisius students have at their disposal an excellent library collection to support student research. The Library subscribes to thousands of full text electronic journals, hundreds of article databases, and hundreds of print journals. Electronic resources can be accessed from computer labs and residence halls on campus and remotely from any connected device. The Library has a substantial complement of equipment, including computers; printers; cameras (digital still or video); projectors; headphones (with or without microphone); e-book readers; and SmartBoards.

Canisius students and faculty have convenient and rapid access to ten million volumes in the ConnectNY academic library consortium and to the extensive research collections of the Center for Research Libraries. Additional library materials are available via Interlibrary Loan.

When school is in session, the Library is open every day of the week for study and research and is open nights until 2:00 a.m. from Sunday through Thursday. Professional librarians and technical staff are available to provide assistance with research or in the use of the Library and its facilities in person, via email, by text, or through chat (24/7).

The Rev. J. Clayton Murray, S.J. Archives & Special Collections, located in Bouwhuis 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 throughout the campus. Instructional computing facilities include over 300 personal computers, as well as scanners and printers. Computers in student labs have access to word processing, spreadsheet, database, presentation, web development, and statistical analysis software. There are several Internet Plazas located around campus where students may check their electronic mail or access the web. All computers are connected to the Internet and have access to extensive online research databases provided by the Andrew L. Bouwhuis Library.

Canisius College has an extensive website that includes web-based electronic mail, course materials, course discussion boards and course registration.

Residence halls are wired for satellite TV (including several Canisius-oriented channels) and Internet access. Most classrooms provide video and computer projection for the instructor.

Several departments, including Digital Media Arts and Computer Science, maintain a substantial complement of computing equipment specific to their needs.

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 at <http://www.canisius.edu/sl>

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 and International Partnerships 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 (*open only to students in the college's honors program)
- 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
- Oviedo, Spain – University of Oviedo
- Paris, France – IESEG School of Management
- Porto Alegre, Brazil – Federal University Rio Grande do Sul
- Queensland, Australia – University of the Sunshine Coast
- Rio de Janeiro, Brazil – Pontifical Catholic University of Rio de Janeiro
- Rome, Italy – Lorenzo de' Medici University
- San Salvador, El Salvador – Casa de la Solidaridad, University of Central America
- Seoul, Korea – Sogang University
- Strasbourg, France – University of Strasbourg, School of Management (one-year dual degree program available)
- Tokyo, Japan – Sophia University

Retention

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

- Class of 2015 – 82%
- Class of 2016 – 80%
- Class of 2017 – 86%

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.

Course Offerings

Actual offerings are listed in the online course schedule produced each semester by the Student Records and Financial Services Center.

1 Commission on Higher Education, Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104 Telephone: 215-662-5606

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 Commission on Accreditation of Athletic Training Education, 2201 Double Creek Drive, Suite 5006, Round Rock, TX 78664 Telephone: 612-733-9700

6 National Council for Accreditation of Teacher Education, 2010 Massachusetts Ave, NW, Suite 500, Washington, DC 20036-1023 Telephone: 202-466-7496

7 Council on the Education of the Deaf, Dr. Tony Martin, Lamar University, PO Box 10076, Beaumont, TX 77710 Telephone: 409-880-8175

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

STUDENT AFFAIRS

Participation at all levels of the college's operation is an important part of the student experience at Canisius. Student involvement is a valuable part of each individual's learning process and to the college as a whole, enabling the institution to draw upon the creativity, innovation and leadership of its students in its efforts to serve them better.

Students discover that education takes place both inside and outside of the classroom. In keeping with the Jesuit ideal of educating the whole person, students learn and develop a complete sense of self through participation in such experiences as life in the residence halls, co-curricular activities, organizational membership and leadership, social involvement in the community and membership on the various college committees. Through such involvement in the entire life of the college community, a student's years at Canisius will be a time of intellectual growth, advancement in self-knowledge and an improved knowledge of others.

Division of Student Affairs

The vice president for student affairs/dean of students, 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:

- ALANA (African American, Latino/a, Native American, Asian American) Student Center
- Athletics – Division I Intercollegiate
- Campus Ministry
- Campus Programming
- Club and Intramural Sports
- Counseling Center
- The Griff Center for Academic Engagement
- International Student Programs
- Office of Event Services
- Public Safety
- Residence Life
- Student Health Center
- Study Abroad Programs

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 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 MAAC 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 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

Campus Programming

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, including the Undergraduate Student Association (USA) 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) 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 are listed below. Additional club sports can be added based on student interest.

Club sports are played at a more competitive level than intramurals and often involve team travel. Students are responsible for additional fees associated with most club sports.

Co-ed club sports

- Bowling
- Cheerleading
- Endurance
- Field hockey
- IHSA (Equestrian)
- Mixed Martial Arts
- Tennis
- Track and Field
- Ultimate Frisbee

Men's club sports

- Men's Rugby
- Men's Soccer
- Men's Volleyball
- Men's Ice Hockey

Women's club sports

- Dance Griffs
- Women's Soccer
- Women's Volleyball

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
- Basketball-pickup
- Volleyball
- Floor Hockey
- Indoor Soccer
- Outdoor Soccer
- Flag Football
- Handball
- Dodgeball
- Whiffle ball

Counseling Center

The 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 Academic Engagement

The Griff Center for Academic Engagement 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 and career advising and has staff ready to assist students in their academic and professional development.

The Griff Center provides a comprehensive orientation for all new students; academic advisement for freshmen, student-athletes, undecided majors and transfer students; career development, internships services, academic mentoring, accessibility support, and veteran support services. The Griff Center collaborates with the Tutoring and Study Center and the college's general proctor site. The goal of the Center is to provide students with the academic support and assistance they need to become successful lifelong learners.

- **New Student Orientation (NSO)**

All incoming first-year and transfer students are required to attend NSO. This exciting and interactive program is the first step in ensuring a successful college career. NSO allows new students to gather together to meet new people, gain the opportunity to partake in a number of activities and explore many aspects of college life.

- **GRIFF 101**

A first year program at Canisius designed to make the transition to college successful and prepare all first-year students to take full advantage of the many exciting opportunities available throughout their college experience. Each entering freshman is assigned to an interest-based experience where a faculty/staff member is the facilitator of the class and serves as the first-year academic advisor. This non-credit course runs each week for the first semester and allows students with the same interest to engage in a common theme. In addition, the facilitator/advisor will explain the core curriculum; introduce academic resources; address student performance; and discuss transitional topics throughout the weekly sessions.

- **Academic Advisement for Freshmen, Transfer, Undecided, and Student-Athletes**

Students are encouraged to stop in and receive support for a variety of issues related to their academic success, including registering for classes, making changes to academic schedules, dropping or withdrawing from classes, and questions regarding specific classes and curriculums.

- **Career Services and Internship Opportunities**

Students and alumni who are seeking assistance in developing their career paths, as well as seeking internship opportunities that will link their classroom experiences to the workplace can receive support and assistance in the Griff Center.

- **The Tutoring Center**

The tutoring center provides a variety of opportunities for students to achieve their own academic success. The services are free-of-charge and open to all Canisius students. Group tutoring services 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.

- **Forming Your Foundation for the Future**

Workshops for Life are part of an innovative hands-on program offered through the Griff Center that present a variety of academic skills to help students become lifelong learners.

- **The Study Center Program**

The Study Center is a place for all students to focus on their academic work in a quiet environment where tutors are available to answer questions and provide academic support.

- **Academic Mentor Program (AMP)**

Students experiencing academic difficulty can seek support through AMP. Academic Mentors meet regularly with students and assist with better time management, handling of courses, study skills, etc., to help achieve academic success.

- **Accessibility Support**

Canisius is committed to creating equal access for all Canisius students with permanent or temporary disabilities. It is our goal to help meet the needs of all students who register with the office and provide proper documentation.

- **Veteran Support Services**

Canisius is dedicated to providing an environment that is supportive and friendly, where veterans feel comfortable seeking assistance concerning both academic and non-academic matters. A specialized veteran's lounge is located on the 3rd floor of Old Main.

- **General Proctor Site**

The Griff Center oversees all proctoring of special need and make up exams. In addition to students who are registered with accessibility support, students use this service a great deal due to travel required of their sport, family and health issues, and/or course conflict. Students are required to arrange this service with their professor and schedule in advance with the proctor site.

International Students

Canisius College welcomes international students and appreciates the cultural diversity they bring to our student body. Currently our international students are from approximately 30 countries including areas as diverse as Europe, the Middle East, Africa, Asia, South America and Australia. The Office of International Student Programs advises international students and assists them with their adjustment to Canisius College and American culture by organizing educational and social programs. To further encourage cultural understanding within the Canisius community, the International Student Programs Office also arranges community families and peer mentors for our international students. 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.

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.

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, operating 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 at <http://www.canisius.edu/campus-life/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 at <http://www.canisius.edu/campus-life/public-safety/policy-laws-stats/>. A printed copy may be obtained by calling the dean of students at 716-888-2130.

Residence Life

Residence 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. Residence 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 double rooms, suites and social lounges with kitchens on alternate floors. The George M. Martin Honors Hall offers students in the College Honors Program a unique opportunity to live in an educational learning environment. This residence hall features single and double rooms with community bathrooms, kitchen and two social lounges. This hall's environment stresses academic excellence, social interaction, and fosters community values and trust among its residents. 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 four- 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 our website at <http://www.canisius.edu/campus-life/residence-life/>

Student Health Center

The Student Health Center is committed to providing students high-quality health care that is easy to access, individualized and effective. Our staff views each visit as an opportunity to provide needed medical and nursing care and to educate students to become informed partners in medical decisions. Providers assist students in identifying behaviors, perceptions and habits that are beneficial for current and future health.

The Center is staffed by physicians, a nurse practitioner, and registered nurses. Appointments are recommended and can be made 24/7 using My Canisius Health, the student online scheduler. Students can also “walk in” to schedule an appointment. Students who are sick or injured may be treated at MASH Urgent Care when the Student Health Center is closed. Through a unique agreement, MASH Urgent Care will provide free round trip van service to a MASH Urgent Care Center 7 days a week. MASH vans pick up and return students to any of the college’s regular shuttle stops. Although the ride is free, care provided is billed to student’s health insurance plan. It is important to bring your health insurance card and photo identification to your MASH visit.

MASH Urgent Care Center

3980 Sheridan Drive
Amherst, New York 14226
Phone: 716-929-2800

Medical emergencies on campus are handled by Public Safety. Officers are trained in first aid and CPR and respond to the scene of on-campus medical emergencies.

Student Health also offers an on-call nurse service 24/7 by calling 1-800-850-4556. For detailed information about Student Health services please visit https://www.canisius.edu/student_health/

Health and Accident Insurance

Canisius College strongly recommends that all students have health insurance.

- Students should carry their health insurance card with them and know how their plan coverage works when they are at college.
- Canisius offers students registered for 6 or more credits a sickness and accident plan designed for the healthy college student. Enrollment periods occur in September and January.
- All full-time undergraduates have accident and accidental death coverage through the college. This coverage is limited.
- Details about the sickness and accident plan are available on the Student Health Center website.

New York State Immunization Requirements for Class Attendance

Measles, Mumps, Rubella

New York State laws require all students registered for 6 or more credits and born on or after 1/1/1957 to submit proof of immunity to measles, mumps, and rubella to Student Health. Students must demonstrate two measles (rubella) vaccinations, one dose of rubella and one dose of mumps vaccine given on or after the first birthday.

Meningitis Requirement

All students registered for 6 or more credits regardless of age or year of birth are required by New York to be informed about the risk of meningococcal meningitis and either obtain the meningitis shot against strains A,C, Y, W-135 or sign a waiver declining the vaccination.

Submission Dates and Non-Compliance

Health requirements must be submitted before the first day of class. Non-compliance with these health requirements results in registration cancellation, removal from college housing, and inability to register with the college for future semesters. This is strictly enforced across the campus.

The Student Health Center website has detailed information about health requirements and links to the required forms.

Study Abroad

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 22 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, some 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.

ADMISSIONS POLICIES

Men and women 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 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.

Advanced Standing and Transfer Credit 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 the Griff Center for Academic Engagement (OM 013) 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 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 Director of Academic Advisement, 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 the Griff Center for Academic Engagement who will consult with the major program or department as needed.

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 from countries whose original language is not English must also submit official test results from either the paper or electronic version of the Test of English as a Foreign Language (TOEFL) exam. All documents should be submitted to the Office of Undergraduate Admissions. To be eligible for a student visa, students must also submit evidence of sufficient funding to cover educational expenses.

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. Additionally, a Transfer Recommendation Form completed by the dean of students or other appropriate official from the most recent college attended is required. 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.

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.

Advanced Standing and Transfer Credit 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. If an associate's degree was earned by the student all courses with a minimum grade of D or better will be considered for transfer credit.

For teacher certification candidates, a grade of C or better is required to transfer courses listed as major courses in teacher education, special education, adolescence education, physical education, health education and athletic training 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 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.

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.

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 three courses 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 complete a Change of Status Request form, available from the Student Records and Financial Services Center. These students must then submit all required admission documentation 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 first session of the class. Auditing fees are listed in the Tuition section of the catalog.

ACADEMIC POLICIES

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.

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 associate dean of his/her school. 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 associate dean who will confer with the course instructor. The request with supporting documentation is reviewed by a panel composed of an associate dean from each of the three schools and a designate from the Griff Center for Academic Engagement. In the case of a split decision by the panel, the final decision will reside with the dean of the school of the student. Withdrawals will not be granted during final exam week.

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 are readmitted 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. Normally, 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.

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 others, the Dean of Students may place the student on an involuntary leave of absence.

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.

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.

Code of Academic Integrity

I. 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."

II. 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?

The MLA Handbook for Writers of Research Papers defines plagiarism as using “another person’s ideas or expressions in your writing without acknowledging 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.

III. Procedures for Adjudicating Violations of the Code of Academic Integrity

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.

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.

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.

Academic Forgiveness Policy

This policy is intended to assist former Canisius College students whose grade point average is below 2.0. Education majors must have a grade of "C" or better in their education courses and have a cumulative grade point average of 2.50 or higher to be eligible to student teach. 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.

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.

First-Year Writing Placement

The First-Year Writing Program in conjunction with the Griff Center for Academic Engagement screens incoming freshmen for appropriate placement in writing courses (FYS 101 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 for Academic Engagement, screens incoming freshmen for appropriate placement in mathematics. High school average, SAT, ACT, and high school mathematics scores are used to determine the placement.

Grades

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, 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 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.

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.

A. The initial stage in the grievance procedure is as follows:

1. 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.
2. 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.
3. 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.
4. 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.

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

1. 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.
2. 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.
3. 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.
4. 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:
 - a. The grade grievance procedure was not followed.
 - b. Prejudice was manifested against either the student or the instructor.
 - c. 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.

5. 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.

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.

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.

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.

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.

Study Abroad

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.

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.

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.

Credit by Examinations

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) or by the New York State College Proficiency Examination Program (CPE). 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 CPE and 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 CPE or 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 should speak to the appropriate associate dean. Permission to take the examination must be obtained from the appropriate associate dean.

Quality Points

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. Points are assigned as follows for each semester hour completed:

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

A student's grade point average is obtained by dividing the total number of grade quality points by the total number of credit hours carried.

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:

1. 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.

2. 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.
3. 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.

Policy on Student Records

The Family Educational Rights and Privacy Act of 1974, as amended (FERPA), 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.

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. A "student" is defined as one who has attended or is attending Canisius College and regarding whom Canisius College maintains education records.

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 who have a legitimate educational interest in the records.
- 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 or parent 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 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 inspect and review 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.
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. 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.

Recognition of Academic Excellence

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."

The two categories are:

1. 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.
2. 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.

Graduation

Degrees are awarded three times a year: September 15 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	Approx. September 15
In December	December 2	Approx. 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 September 15 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 is to differ 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.

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.

All College-Wide Awards and Prizes

(Awards and prizes are based upon seven semesters of completed work)

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.

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 here. This student will have achieved an exceptionally high cumulative average while a student here.

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.

ALANA Achievement Award is bestowed on a senior who exemplifies the Jesuit value of *Magis* through academic excellence, character, leadership and dedication to the Canisius community and to others.

The Campus Ministry Award is given to a graduating senior 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 Kristin M. Brady Award for Excellence in All-College Honors Thesis is awarded to the student who writes the most outstanding thesis in the All-College Honors Program.

The Robert J. Butler Award for Leadership recognizes the student(s) who has exercised strong leadership in carrying out the co-curricular and extra-curricular activities for the All-College Honors Program, and who has taken leadership roles in honors classes. It is named for a previous director of the Honors Program.

Outstanding Senior Honors Student is awarded to All-College Honors students who are graduating with the highest cumulative GPAs.

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.

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.

College of Arts & Sciences Departmental/Program Awards

ABEC Program

The 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 Highest GPA Award is awarded to the student who holds the highest GPA in the ABEC major.

ABEC Excellence in Research Award recognizes a student whose outstanding scientific research helps to advance the understanding of animals.

ABEC Service Award recognizes the outstanding community services of a graduating animal behavior major.

Bioinformatics Program

The 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.

The Bioinformatics Program Excellence in Research Award honors a bioinformatics student who has completed significant research at the undergraduate level.

Biology Department

The Alpha Theta Chapter of Tri Beta, National Biological Honor Society, Fialkiewicz Award for Academic Excellence in Biology is given to the graduating biology major with the highest academic average.

The Alpha Theta Chapter of Tri Beta, National Biological Honor Society, Alexander Award for Outstanding Research in Biology is given to the graduating biology major who has completed the most significant independent research project leading to presentation or publication in scientific literature.

The Nancy Wohlschlag Distinguished Research Award is given to the graduating biology major who has completed a significant research project leading to presentation or publication in the scientific literature.

The 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.

The 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.

Chemistry/Biochemistry Department

The Valerian A. Ruskiewicz Award for Distinction in Chemistry

acknowledges superlative academic achievement demonstrated by the highest GPA in the department.

The 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.

The 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.

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.

Classics Department

The David B. Dietz Classics Book Award is given for outstanding performance in Classics courses.

Communication Studies Department

The Academic Excellence in Communication Studies Award is given to the graduating Communication Studies senior with the highest GPA in the major.

The Academic Excellence in Digital Media Arts Award is given to the graduating Digital Media Arts senior with the highest GPA in the major.

The 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.

The 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.

The American Advertising Federation Academic Excellence Award is given to the graduating senior member of the federation with the highest GPA in the major.

The 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.

The 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.

The 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.

The 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

The Computer Science Department Excellence in Academics Award is presented to graduating computer science majors who have achieved an outstanding academic performance.

The 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

The 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.

The 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.

The 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.

Joyce Carol Oates Award awarded to the graduating students who possess writing in the style of Joyce Carol Oates.

Environmental Science Program

The 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.

The 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

The 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

The 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.

The 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.

The 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

The 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.

The 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.

The Rev. Nicholas J. Sullivan, SJ Award is given for excellence in historical writing.

The 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

The International Relations Academic Excellence Award is given to the senior with the highest GPA among International Relations majors.

The 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

The Dr. Robert Tidd Award for Distinction in Mathematics is given to an outstanding senior upon recommendation by the Department of Mathematics and Statistics.

The 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

The General George C. Marshall Award is given annually by the George C. Marshall Foundation to the outstanding senior ROTC cadet in Buffalo.

The 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

The Northeast Conference on the Teaching of Foreign Languages (NECTFL) Board of Directors Award for Excellence in Language Study is presented to a graduating senior enrolled in the most advanced course of the language who shows evidence of interest in the language and international studies beyond work in the classroom.

The Raymond L. Girard Award for Distinction in French is bestowed annually on the graduating senior who best exemplifies the qualities of academic excellence and service in the field of French language, literature and culture.

The 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.

The German Consulate of New York Award for Excellence in German is bestowed on the graduating senior who exemplarily combines academic excellence in German language, literature and culture with service to his or her fellow students in the major over the course of four years.

The James J. McGoldrick Award for Excellence in German is bestowed annually on the graduating senior who best exemplifies the qualities of academic excellence and service in the field of German language, literature and culture.

The 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.

The 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

The 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.

The 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

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.

Psychology Department

The 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.

The Outstanding Psychology Student Award is presented annually to graduating seniors with outstanding academic and pre-professional accomplishments in the field of psychology.

Religious Studies Department

The 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.

The 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

The 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.

The Canisius College Anthropology Award is given to a graduating senior with the highest overall cumulative GPA in the major.

The 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

The 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

The 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.

The 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

The Thomas & Camille Caulfield Award is given to the graduate student counselor of the year.

Education Department

The 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.

The 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.

The 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.

The 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

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

The 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.

The Health and Human Performance Award is awarded to the student who best shows excellence in the field of human performance and exercise science, community involvement and excellent internship performance.

Future Professionals in Health & Wellness Award is presented to an outstanding senior in health and wellness who is committed to service in the health and wellness professions.

Sport Management Department

The 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

The 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.

Outstanding Business Scholar 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

The 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.

The New York State Society of Certified Public Accountants Awards are given annually, one to a graduating senior in accounting and one to a graduating student in the MBA program in professional accounting. In each case the award is given to the student who has attained the highest scholastic average in accounting subjects and who is considered to be a desirable candidate for admission to the profession of public accounting.

The Accounting Society Award for Excellence in Scholarship in the Accounting Program is awarded annually to the outstanding senior accounting major.

The 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

The 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.

The 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.

The Marketing Academic Excellence Award is presented annually to the top ten percent of senior marketing majors based on overall GPA.

TUITION AND FEES

Note: The information in this section is valid only for the academic year May 12, 2015 through May 9, 2016. For the most up-to-date numbers please go to <http://www.canisius.edu/resources/accounts/tuition-fees/>

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 application and deposit fees for new students, which are collected by the Office of Admissions. The Trustees of the college, when necessary, may amend the tuition charges, fees and room and board charges.

Application Fee

An application fee of \$40.00 must accompany each formal application for admission to Canisius College. This fee is not refundable.

Tuition Deposits

All candidates for undergraduate admission must make a pre-registration deposit of \$200 on or before 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 credit toward the spring semester room rental charge.

Payment of Tuition, Fees and Room and 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.

Policies

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 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 or housing 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 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 and/or housing 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.

The refund policy is set by the federal government. (Appendix A to Part 668 Standards for Acceptable Refund Policies by Participating Institutions).

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 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:

- A. Any outstanding tuition, default on payment plans, late charges, write-offs or delinquent NDSL/Perkins loans and Peter Canisius loans;
- B. Library – any late fines or replacement fees for books not returned;
- C. Residence Life residence hall damage fees;
- D. 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 semester hours of credit.

Part-Time Students

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

Tuition and Fees: Undergraduate Division Fall and Spring Semesters¹

Effective May 12, 2015 through May 9, 2016

Per semester in all curricula	
Full time (12-18 credit hours)	\$16,641
Part-time	950.00/credit hour
Undergraduate courses in excess of semester hours allotted to each curriculum per semester hour	950.00/credit hour
Audit, per semester hour	475.00
Audit, Alumni & Parents of Students, per course ^{2,3}	\$60.00
Audit, Senior Citizens, per semester (no course limit) ^{2,3}	\$50.00

2015-2016 Housing Rates⁴

Room Rates	Per Semester	Per Year
Bosch/Frisch – Double	\$ 3750	\$ 7500
Bosch/Frisch – Suite	\$ 4222	\$ 8444
Bosch/Frisch Bathroom Suite	\$ 4300	\$ 8600
Delavan Townhouses 2 & 3 person	\$ 4946	\$ 9892
Delavan Townhouses 4 & 5 person	\$ 4575	\$ 9150
Dugan Double	\$ 3708	\$7416
Dugan – Suite	\$ 4356	\$ 8712
George Martin House – Double	\$ 3740	\$ 7480
George Martin House – Single	\$ 4671	\$ 9342
Village Townhouses	\$ 4575	\$ 9150

Semester Fees

Student Government tax (provides partial support for various student activities)	
Full-time students	\$208.00
Part-time students	18.00
College fee (including library, facilities use & ID card)	
Full-time students	\$283.50
Part-time student	13.00/credit hour
Technology fee	
Full-time students	\$112.50
Part-time students	7.50/credit hour
Wellness fee	
Full-time students	\$100.00
Part-time students	\$50.00

Special Fees

Non-Collegiate Learning Assessment Program (NLAP) LLL 499	\$200.00
Portfolio assessor fee	100.00
GRN 497 – Gerontology Practicum Assessment	40.00
EDU 122, PED 150 Portfolio (4 years)	105.00
Laboratory, Computer Usage, or Cassette Usage Fees: (per course)	
Laboratory Usage: Athletic training	
ATH 132, 231, 232, 331, 332, and 431	\$20.00
ACC 211	30.00
Biology	65.00
Chemistry (including breakage allowance)	65.00
Education	20.00
Modern Language	25.00
Physics	60.00
Psychology	20.00
Electronic Course Usage (where required, cost of workbook will be extra)	225.00

Occasional Fees and Charges

Application fee	\$40.00
Diploma reprint fee	30.00
Orientation fee: all new full-time undergraduate freshman students	250.00
Undergraduate transfer orientation fee	150.00
Late payment fee	100.00 monthly (max.\$300)
ID card late fee or replacement	20.00
Returned check charges	25.00
Vehicle registration fee	varies
Transcript of records, each	N/C
Thesis binding fee	varies
Consortium Administration fee, per semester	350.00
Tuition remission and exchange program	varies
Study Abroad Canisius Program	500.00
Study Abroad Non-Canisius Program	750.00

1 Tuition waiver: see Financial Aid section.

2 On a space-available basis.

3 No fees, except for laboratory, are charged.

4 A detailed description of each plan may be obtained from the Student Records and Financial Center. First semester freshmen in Bosch, Frisch, or Eastwood may choose either Plan 1 or Plan 2. Freshmen in the second semester may choose either Plan 1,2, or 3. Upperclassmen in Bosch, Frisch, or Eastwood must be on Plan 1,2,3 or 4. Residence students not in Bosch, Frisch, or Eastwood, and commuter students, may choose any of the six options. If Plan 1,2,3,4 or 5 is purchased in the fall semester, it will automatically be re-billed in the spring semester, unless changed during the first two weeks of the spring semester.

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 worksheet may be obtained online at www.fafsa.gov. Incoming students (freshmen and transfers) who complete their applications by February 15 will receive first preference in the evaluation procedure. Returning students should submit 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.

Estimated Student Budget for the Academic Year 2015-2016

	Commuter	Resident
Tuition	\$ 33,282	\$ 33,282
Fees	1,408	1,408
Books/Supplies	1,000	1,000
Room and Board	2,200	12,766
Personal/Recreation	700	700
Transportation	800	800
Total	\$ 39,390	\$ 49,956

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.

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.

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 Financial Aid Office 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.

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.

2015-2016 TAP

2014 New York State Net Taxable Income	TAP Award
\$0 - 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

2014 New York State Net Taxable Income	TAP Award
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 \$ 581 to \$ 5,775 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. FAFSA worksheets are available online at www.fafsa.gov.

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

Federal Perkins Loan Program: The Federal Perkins Loan Program is a federally funded program administered by Canisius College and awarded on the basis of financial need. It is available to both full-time and part-time matriculating students. The total undergraduate maximum is \$15,000.

The aggregate maximum for graduate students is \$30,000, including all undergraduate loans through this program.

The annual percentage rate of the loan is 5 percent. Repayment will begin nine months after the student ceases to be enrolled at least on a half-time basis. There is no interest charged while the student is enrolled in school at least half-time or during the nine-month grace period.

Amount Borrowed	Amount of Payment	Number of Payments
\$1,000	\$90.26	12
2,000	93.64	25
3,000	97.66	39
4,000	127.69	40
6,000	191.53	40
7,000	223.45	40
9,000	287.29	40
10,000	319.21	40

Federal and institutional regulations require students who have taken out a Federal Perkins Loan, a Federal Stafford or Direct Student Loan to complete online pre-loan and exit interviews before graduating or withdrawing from the college. Important information concerning repayment schedules and deferment and cancellation provisions will be provided. It is to the student's advantage to complete these online interviews. The Student Records and Financial Services Center will direct students to the online interview if they withdraw from the college.

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 20 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 \$1,500 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.

Merit Scholarships

Canisius College funds renewable scholarships for incoming freshmen which range from \$ 11,000 to \$ 23,000 per academic year. Among the scholarships awarded are the Ignatian Scholarships, the Trustee's Scholarships, 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 \$1,000 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.

Jesuit Scholarship

Incoming freshmen graduating from a Jesuit high school are eligible for \$1,000 per year for four years.

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.

Children of Alumni: Full-time undergraduate students who are children of Canisius alumni are eligible for an alumni grant of \$1000 per year for four years.

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. It is not necessary that a student be enrolled in the Military Science curriculum to qualify for these scholarship awards. The application window for returning students begins June 12 and closes January 10. The scholarship covers tuition and mandatory fees. All qualifying students will also receive a flat rate of \$600 for books, and a subsistence allowance of up to \$500 per month for the length of the scholarship.

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 Family Education Loan Program (FFELP) 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 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, 2006 (regardless of any previous loan history) will be the current fixed rate. 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 1.073 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, 2006 will be the current fixed rate. Interest begins at the time of disbursement. An origination fee of up to 4.292 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.

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.

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 Financial Aid Office promptly when they receive additional funds from any source not listed in their award letters, or when a student changes his/her enrollment status.

Financial Aid Check List

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

- 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 Anytime TAP at www.hesc.ny.gov.
- 4. If requested, Federal Income Tax 1040 Form transcripts (parents and student) for the previous 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:									
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
A student must have accrued at least this many graded credits:									
0	3	9	21	33	45	60	75	90	105
With at least this Cumulative Quality Point Average:									
0	1.1	1.2	1.3	2.0	2.0	2.0	2.0	2.0	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:									
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
A student must have accrued at least this many graded credits:									
0	6	15	27	39	51	66	81	96	111
With at least this Cumulative Quality Point Average:									
0	1.5	1.8	1.8	2.0	2.0	2.0	2.0	2.0	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:									
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Minimum credit hours a student must have completed in the previous semester to meet Program Pursuit requirement:									
0	6	6	9	9	12	12	12	12	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 Perkins Loan
- 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 will 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 assure 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) Aid to Part-Time Students (APTS);
- 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.

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.

ACADEMIC CURRICULA

Summary of Curriculum for all Students

- I. Core Requirements (see below)
- II. Major Requirements (see alpha listing)
- III. 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 <http://www.canisius.edu>, select 'Current Students' option, then Online Registration option. Complete instructions can be found on this site.

Core Curriculum Mission

The Canisius College Core Curriculum is rooted in the humanistic ideals of the Catholic intellectual tradition and Jesuit pedagogy with its emphases on academic excellence, the dialogue of faith and reason, and service to humanity.

The Core Curriculum seeks to provide Canisius students with a strong foundation in the humanities and liberal arts as the first step in a transformative experience that will expose them to the richness of human diversity and infuse them with a sense of service in the cause of justice for all peoples, but especially for the poor and marginalized of the world.

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

Lastly, the Core Curriculum seeks to engage Canisius students with the spiritual dimension of human life in the hope that this will enable them to seek God in all things and to become men and women for and with others in the pursuit of wisdom and magnanimity.

Core Curriculum Experiences

I. Foundation Courses: Four courses — FYS 101, ENG 101, PHI 101, RST 101

Students are encouraged to complete these four foundation courses during their first year and as their major schedules permit. Usually FYS 101 is taken during the fall semester and ENG 101 during the spring semester. First-year students should complete PHI 101 or RST 101 during the fall semester and then the other course during the spring semester.

II. Breadth of Knowledge: minimum seven courses

Students take at least seven courses that range over the traditional liberal arts, at least one from each of the following Fields: Religious Studies, Philosophy, Literature and the Arts, History, Social Sciences, Natural Sciences, and Mathematical Sciences. Only courses having the appropriate field-designation satisfy this component of the Core Curriculum.

III. Cross-disciplinary Knowledge and Skills Courses: courses having the following six designations

Students also take courses that satisfy the following cross-disciplinary knowledge and skills goals: Justice, Ethics, Diversity, Global Awareness, Advanced Writing-intensive, and Oral Communication. Courses with an appropriate field-designation or courses that satisfy major or elective credits may also have these designations. Students take as many courses as necessary to complete the knowledge and skills goals.

IV. Core Capstone: One designated course or experience

Ideally after students complete all other Core Curriculum expectations, they become eligible for the Core Capstone. Typically this occurs during a student's junior or senior year. Some Core Capstones might also be capstones in a major (see your major course of study for such overlap).

Descriptions of Core Curriculum Components

The Core Curriculum is a multi-disciplinary program of study that all Canisius College students experience. The Core Curriculum components include:

I. Foundation Courses

The Core Curriculum provides a foundation of four common courses, usually completed during the first year. These courses include basic instruction in writing (FYS 101, ENG 101), attention to the process of critical thinking through the basic development of information literacy (FYS 101, ENG 101, PHI 101, RST 101), and a basic understanding of the importance of studying religion and philosophy within the Catholic, Jesuit tradition of education (PHI 101, RST 101).

Foundation FYS 101: Explorations of Academic Writing — Special Topics

This course emphasizes the production of academic writing through critical analysis of texts with topics drawn from a wide range of academic disciplines. 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.

Foundation ENG 101: Writing about Literature

This course develops strategies for reading and writing about literature — poetry, drama, fiction, literary essays. 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 101 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.

Foundation PHI 101: Introduction to Philosophy

This course acknowledges the special place of philosophy in Catholic Jesuit education. PHI 101 provides a thoughtful examination of philosophical issues, with concern that students learn to use logical and critical analysis to understand the claims and arguments proposed by classical and modern philosophers, including some in the Catholic philosophical tradition.

Foundation RST 101: Introduction to Religious Studies

This course acknowledges the special place of studying religion in Catholic Jesuit education. RST 101 provides an academic introduction to religion, with a concern that students understand the nature and role of religion and religious experience in human life and society, including the Jesuit and Catholic traditions as well as other world religions.

II. Breadth of Knowledge

The Core Curriculum compasses a distribution of liberal arts and sciences courses, one in each of seven Fields. These courses provide a broad examination of the liberal arts tradition and invite participants to recognize the multiple ways that natural and social phenomena have been studied and categorized. The skills and knowledge students develop through the Breadth of Knowledge component of the Core Curriculum reflect the variety of disciplinary norms specific to each Field. Taken together these courses encourage students to reflect on their inner lives, to consider how attention to the life of the mind bears upon reality, and to discern the human relationship to the natural world and to social institutions.

The seven Fields include:

Field 1: Religious Studies and Theology

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

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

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.

III. Cross-Disciplinary Knowledge and Skills courses

The Core Curriculum provides six focal areas that address matters central to the Catholic, Jesuit tradition of education that are necessary for preparing students for the modern world. Students select courses to fulfill all six experiences. Any course may carry a Cross-Disciplinary Knowledge or Skill designation that has a significant component on the focal area. Such courses may also satisfy Field and major requirements as well as elective credit.

Diversity Component

Courses with a diversity component enable students to develop an understanding of the multicultural character of the United States by giving attention to the cultural differences within the United States. This focal concern is grounded on the assumption that a good education ought to provide students with the intellectual tools and broad perspectives for examining their own communities and values as well as the communities and values of other peoples.

Ethics Component

Courses with an ethics component enable students to develop an understanding of personal action, the good in terms of human agency and happiness and living a worthwhile life. Attention focuses on moral issues, living well and the frameworks that make living well intelligible, both personally and professionally. This focal concern is grounded on the assumption that an understanding of ethics is an integral part of educating the whole person for good citizenship.

Global Awareness Component

Courses with a global awareness component enable students to develop an awareness of nations, countries, regions, communities and cultures outside of the United States. This focal concern is grounded on the assumption that we live in an increasingly interconnected world, and that a liberal arts education ought to provide students the intellectual tools and understandings to comprehend global events.

Justice Component

Courses with a justice component enable students to develop an understanding of the nature of justice, including the tension between justice and power, as well as the causes of injustice. This focal concern is grounded on the assumption that we live in a world that increasingly calls to its citizens to promote justice and that a liberal arts education ought to provide students the intellectual tools and understandings to promote justice.

Advanced Writing-intensive Component

Courses at the 200-level or above with an advanced writing component 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 Component

Courses with an oral communication component enable students to develop abilities to communicate effectively and appropriately in a range of contexts, including face-to-face engagements and through practicing their skills with sending and receiving messages. Effective communication helps maintain a sense of community as well as an ability to craft consensus in an increasingly diverse and complex world. Preparation for life in the modern world requires sensitive and skillful communication with those of widely different backgrounds, cultural experiences, and values.

Core Capstone

The Core Curriculum includes a Core Capstone that provides students an opportunity to reflect upon the meaning and significance of the Core Curriculum. Students should ideally take the Core Capstone upon completion of all the other core components, usually in the junior or senior year.

Undergraduate Degrees

To earn a bachelor's degree from Canisius College, each student completes a minimum of 120 credit hours. Each student's course curriculum is distributed across three component areas: (1) Core Curriculum courses; (2) Major Program courses; and (3) free electives courses.

Major Program Courses

Each major program has its own specific requirements that are listed by the individual department under the heading "Curriculum." Students should make sure that any restricted electives are chosen from among the courses approved by his/her department.

For complete information about the Core Curriculum, go to <http://www.canisius.edu/academics/core/>

Electives

The remaining courses may be chosen in any area. These free electives complete the student's requirements for the baccalaureate degree.

Credit Policy

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.

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.

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 — Bachelor of Arts Degree:	
Anthropology	2202
Art History	1003
Classics	1504
Communication Studies	0601
Computer Science	0701
Creative Writing	1507
Criminal Justice	2105
Economics	2204
English	1501
Environmental Studies	2299
History	0310
Humanities	2205
International Relations	4903
Latin American Studies	0308
Mathematics & Statistics	1701
French	1102
German	1103
Spanish	1105
Music	1005
Philosophy	1509
Political Science	2207
Psychology	2001
Religious Studies	1510
Sociology and Anthropology	2208
Specialized Studies	4903
Urban Studies	2214

Arts and Sciences — Bachelor of Science Degree:	
Animal Behavior, Ecology and Conservation	0407
Biochemistry	0414
Bioinformatics	0499
Biology	0401
Chemistry	1905
Computer Science	0701
Digital Media Arts	0605
Medical Laboratory Science	1223
Environmental Science	0420
Journalism	0602
Physics	1902
Social Sciences-General	2201
Professional and Technical Studies	4999

Education and Human Services — Bachelor of Arts Degree:	
Education (Adolescence):	
Biology "7-12"	10401-01
Chemistry "7-12"	1905-01
English "7-12"	1501-01
French "7-12"	1102-01
German "7-12"	1103-01
Spanish "7-12"	1105-01
Mathematics "7-12"	1701-01
Physics "7-12"	1902-01
Social Studies "7-12"	2201-01
Early Childhood Education	0823
Childhood Education	0802
English	0804-01
Social Studies	0804-02
Mathematics	0804-03
Science	0804-04
French	0804-05
German	0804-06
Spanish	0804-07

Education and Human Services — Bachelor of Science Degree:	
Athletic Training	1299-30
Health and Wellness	1299-30
Human Services	2101.00
Physical Education/Health Education	0835
Physical Education Sport Studies	0835
Special Education/Childhood	0808
Sport Management	0599

Business Administration – Bachelor of Science Degree:	
Accounting	0502
Accounting Information Systems	0502
Economics	0517
Entrepreneurship	0506
Finance	0504
Information Systems	0702
International Business	0513
Management	0506
Marketing	0509
Accounting/Professional Accounting (150 hour Program)	0502

Arts and Sciences — Associate of Arts Degree:	
Humanities (General)	5649
Social Sciences	5622

Certificates:	
Computer Science	0701
Women's Studies	2299

Pre-Professional Programs

Canisius College offers pre-professional training for students wishing to pursue a graduate degree in a number of professions. Programs and/or concentrations are available in the following areas:

- Pharmacy 2+4*
- Osteopathic Medicine*
- Dental Medicine*
- Pre-Medicine
- Pre-Dentistry
- Pre-Law
- Pre-Veterinary
- Pre-Pharmacy
- Pre-Engineering

*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.

Minors

Minors are available in the following areas:

Animal Behavior
Anthropology
Anthrozoology
Arabic, Language and Culture
Art History
Biblical Studies
Bioinformatics
Biology
Business
Business Management
Catholic Studies
Cell and Molecular Biology
Chemistry
Child, Family & Community Studies
Christian History, Thought & Ethics
Classics Departmental
Classics Interdepartmental
Clinical Psychology
Computer Forensics
Computer Science
Computer Theory
Creative Writing
Criminal Justice
Economics
English
Environmental Biology
Ethics and Justice
European Studies
Exercise Science
Fine Arts
Forensic Psychology
French Language and Culture
General Psychology
German, Language and Culture

Health & Human Performance
History
Human Resource Management
Industrial/Organizational Psychology
Information Systems
International Business
International Management
International Relations
Irish Studies
Latin American Studies
Law & Public Policy
Leadership
Literature
Management of Technology
Mathematics
Music
Music Business
Neuroscience
North American Studies
Peace and Justice Studies
Philosophy
Psychology
Physics
Political Science
Religions of the World
Religious Studies
School Psychology
Social Sciences
Sociology
Spanish Language and Culture
Sports Psychology
Studio Arts
Supply Chain Management
Theatre Arts
Women's Studies
Writing
Zoo Biology

Courses of Instruction

The college year consists of two semesters, fall and spring. The unit of instruction is the semester hour or credit hour, which consists of one lecture period of 50 minutes length each week for the entire semester. A course having three 50-minute class periods a week will, therefore, earn three semester hours of credit. A two- to three-hour period of laboratory work in the sciences or education each week is considered equivalent to one lecture period, and therefore, to one semester hour.

The number of semester credits to be earned in a given course is always indicated by the number after the course title.

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 107-108 Human Anatomy and Physiology), 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. Upperclassmen, on the approval of the department chair, may take courses in the 500-599 category.

Courses in the 600 category are restricted to graduate students only.

All courses described in the catalog are scheduled for both 2015-2016 and 2016-2017 unless otherwise indicated.

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.

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 Student Records and Financial Services Center. It is the student's responsibility to make sure the record reflects their correct major, concentration or minor data.

Minors are an option available to students. The requirements for each minor are outlined in the appropriate departmental sections.

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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.

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.

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.

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.

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.

Academic Advisement

Students come with diverse needs and varied backgrounds. The college believes that this diversity calls for individualized assistance as students develop into self-directed, independent learners. The Griff Center for Academic Engagement provides new 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 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 for Academic Engagement 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.

Freshmen: Each entering freshman is assigned to a GRIF 101 interest-based experience where a faculty/staff member is the facilitator of the class and serves as the first-year academic advisor. This non-credit course runs each week for the first semester and allows students with the same interest to engage in a common theme. In addition, the facilitator/advisor will explain the core curriculum; introduce academic resources; address student performance; and discuss transitional topics throughout the weekly sessions.

Undecided Students: Students who have not selected a major after their freshman year will receive academic advisement and career services from the Griff Center for Academic Engagement.

Part-time Students: Part-time students are required to meet with an advisor, and are encouraged to use the services of the Griff Center for Academic Engagement in selecting proper courses and understanding the resources that are available to assist them at the college.

Upper Class Students: After the freshmen year, students who have selected a major are assigned a major advisor in their academic field of interest. The Griff Center will assist with the transition to the academic department and major advisor assignments. Upperclassmen must meet with their advisor within the academic department for major advisement each semester.

Non-Matriculated Students: Non-matriculated students are registered through the Student Records and Financial Services Center in BA 106. Those who are interested in matriculating at Canisius are welcome to meet with an advisor in the Griff Center for Academic Engagement.

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.

COLLEGE OF ARTS AND SCIENCES

Patricia E. Erickson, Interim Dean; Debra Instone, Associate Dean and Director of Assessment; Barbara J. Porter, Associate Dean and Director of ESL & International Education

The College of Arts and Sciences offers curricula leading to undergraduate and graduate degrees. The undergraduate curricula provide programs in a wide range of disciplines in the humanities, fine arts, natural sciences and social sciences. We offer 38 undergraduate majors in 18 academic departments. Each program combines the liberal-arts objectives of the Core Curriculum with the specific goals of the student's major field.

The College of Arts and Sciences offers a graduate program leading to master of science degrees in Communication and Leadership, and Anthrozoology.

Undergraduate majors

Animal Behavior, Ecology and Conservation
Anthropology
Art History
Biochemistry
Bioinformatics
Biology
Chemistry
Classics
Communication Studies
Computer Science
Creative Writing
Criminal Justice
Digital Media Arts
Economics
English
Environmental Science
Environmental Studies
European Studies
French
German
History
International Relations
Journalism
Latin American Studies
Mathematics and Statistics
Medical Laboratory Science
Music

Philosophy
Physics and Pre-Engineering
Political Science
Psychology
Religious Studies and Theology
Sociology
Spanish
Specialized Studies
Urban Studies

Additionally, there are two interdisciplinary majors offered that require preapproval before declaration through the deans office: (1) Humanities and (2) Social Science. A certificate program in Women's Studies is offered in the College of Arts and Sciences. The many minors offered in the College of Arts and Sciences are identified in the descriptions of departmental offerings.

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

The faculty in the College of Arts and Sciences is committed to providing an excellent liberal arts and sciences education by truly engaging students in the classroom, laboratory, studio, and broader community. Through creative expression, scholarly interpretation and research, the College strives to instill in all students critical thinking, effective oral and written communication skills and social values that embrace the Jesuit tradition. In the various disciplines that comprise the natural sciences, social sciences, and humanities, the faculty seek to educate the whole person in preparation for service and leadership in a global society.

RICHARD J. WEHLE SCHOOL OF BUSINESS

Richard A. Shick, Dean; Gregory R. Wood, Associate Dean; Laura A. McEwen, Assistant Dean and Director, Graduate Business Programs; Frank Swiatek, Interim Director, Center for Professional Development, Executive in Residence; and Sara Vescio, Executive Director of the Women’s Business Center

The Richard J. Wehle School of Business offers curricula leading to undergraduate and graduate degrees through the departments described below.

A complete description of the academic majors is contained elsewhere in this catalog. The majors and the departments where they are housed are shown in the following table.

Majors	Department
Accounting	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.

All students majoring in business will be required to participate in assessment exercises appropriate for meeting accreditation requirements.

The graduate programs lead to the degrees of master of business administration and master of business administration in professional accounting, and a master of science in Forensic Accounting. They provide the graduate student with sound preparation for business decision making and leadership. They are described in the Graduate Catalog.

The School of Business offers a 150-hour program leading to undergraduate and graduate degrees in accounting, plus dual degree programs for students in any undergraduate major leading to one of the two graduate degrees: MBA or MBAPA. The 150 hour programs are designed to provide students the opportunity to sit for the CPA exam in New York after four years. 150 hours is required for to obtain the CPA license in New York and most states.

The Wehle School of Business includes a Center for Professional Development, which provides numerous professional development and training programs for the Western New York community. There is also a Women’s Business Center that assists individuals who are interested in starting a business or growing an existing enterprise.

Mission Statement

The Richard J. Wehle School of Business develops current and potential business professionals to lead within their organizations, to excel in the globally competitive marketplace and to behave as ethically and socially responsible individuals. This is achieved through teaching excellence, intellectual vigor and community involvement in the Jesuit academic experience.

- **Lead within their organizations:** Students from our undergraduate and master’s programs will be prepared to successfully work with and motivate colleagues to accomplish organizational goals.
- **Excel in the globally competitive marketplace:** Leveraging our location on an international border, students will demonstrate knowledge of the globally competitive marketplace.
- **Ethically and socially responsible individuals:** Students will demonstrate ethically and socially responsible thinking and behavior and use their gifts in the service of others
- **Teaching excellence:** Maintain an environment of active and experiential student learning and intellectual growth using qualified and caring faculty.
- **Intellectual vigor:** Produce innovative and impactful faculty scholarship that advances knowledge related to pedagogy and professional practice.
- **Community involvement:** Encourage and support faculty and student activities that provide community service to and play an active role in our regional environment and targeted international communities.

- **Jesuit academic experience:** Use transformative learning rooted in the Catholic intellectual tradition to engage students in the classroom and community, caring for their spiritual, intellectual, emotional and physical lives, in order to educate the whole person in the service of others.

The Wehle School's undergraduate and graduate programs are accredited by the AACSB International (The Association to Advance Collegiate Schools of Business) Accreditation establishes standards for collegiate schools of business in order to promote high levels of educational quality. Less than 5% of the world's business schools have met the rigorous standards of AACSB and are accredited.

Canisius College has a chapter of Beta Gamma Sigma, a national honor society recognizing outstanding scholastic achievement by students in business administration. Juniors ranking in the top seven percent of their class, seniors in the upper 10 percent, and graduate students who graduate in the top 20 percent are eligible for membership.

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.

ACC 201	Financial Accounting	3 credits
ECO 101	Macroeconomics	3 credits
ECO 255	Business Statistics I	3 credits
FIN 201	Introduction to Finance	3 credits
MGT 101	Management of Organizations	3 credits
MKT 201	Principles of Marketing	3 credits
Business elective: one course (ECO 102, 256; FIN 311; MGT 325, 360, 364, 370; MKT 320, 351, 352)		3 credits
Total	(7 courses)	21 credits

Professional Student Organizations

The Wehle School of Business 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: The American Marketing Association (AMA), Collegiate Entrepreneurs' Organization (CEO), Enactus, The Accounting Society, Society for Human Resource Management (SHRM), Association for Operations Management, Quad Gear and the Economics/Finance Club.

SCHOOL OF EDUCATION AND HUMAN SERVICES

Jeffrey R. Lindauer, Dean; Nancy Wellenzohn, Associate Dean for Undergraduate Programs, Shawn O'Rourke, Associate Dean for Graduate Programs, Tiffany Fuzak, Program Coordinator; Nancy Wallace, Director of School and Community Partnerships

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 of *cura personalis*, 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), formerly the National Council for the Accreditation of Teacher Education (NCATE). Specific accredited programs include Athletic Training by the Commission on Accreditation of Athletic Training Education (CAATE), Counseling and Human Services by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), and Deaf Education by the Council on Education for the Deaf (CED). 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 which include: early childhood education (birth through grade 2); childhood education (grades 1 through 6); a dual certification program in early childhood/childhood education (birth through grade 6); and a dual certification program in students with disabilities /childhood education (grades 1 through 6). Each of these programs require candidates to select an academic concentration in one of nine disciplines: English, mathematics, biology, chemistry,

physics, social studies, French, German, 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.

Undergraduate degree programs in adolescence education lead to teacher certification (grades 7 through 12) in one of nine academic disciplines: biology, chemistry, physics, English, mathematics, social studies, French, German 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 athletic training, health and wellness, physical education/health, physical education sports studies, 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 Office of Professional Studies.

The School of Education and Human Services offers a variety of master's degrees in the departments of Counseling and Human Services (mental health and school counseling), Graduate Education and Leadership (college student personnel administration, differentiated instruction, deaf education, educational administration and leadership, educational technologies and emerging media, literacy, and TESOL), Kinesiology (physical education and sport administration), Professional Studies (applied nutrition, community and school health, health and human performance, respiratory care and health information technology), and Teacher Education (adolescence education, childhood education, and special education). These programs are described in the Graduate Catalog.

Conceptual Framework

Introduction

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 and 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 ([The Service of Faith and the Promotion of Justice in American Jesuit Higher Education](#), 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).

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.

Service

Candidates in the SEHS are provided with a variety of service opportunities to enable them to learn from populations that are ethnically, racially, culturally, religiously, and intellectually diverse. Service learning opportunities embedded in the academic program are intended to "*emphasize the accomplishment of tasks which meet human needs in combination with conscious educational growth*" ([Combining Service and Learning: An Introduction](#) Kendall, 1990, p. 20).

Service initiatives within candidates' coursework provide them with a healthy forum of exchange among their classmates and professors. This model has been shown to increase the value of the experience for the student and enhance the relationship between the academic material and the service experience ([How Service Learning Affects Students](#), Astin, Vogelgesang, Ikeda, & Yee, 2000).

Astin, Vogelgesang, Ikeda, & Yee ([How Service Learning Affects Students](#), 2000) have demonstrated that service participation positively effects important outcome measures including GPA, critical thinking skills, a commitment to activism and the promotion of racial understanding, leadership activities, interpersonal skills, choice of a service career, and plans to participate in service after college. Other benefits include the development of citizenship skills and a higher regard for social responsibility and diversity ([Educating Tomorrow's Citizens Through Service-Learning](#), Keith, 1994).

Throughout their coursework, field experiences, and clinical practice candidates are encouraged to seek academic excellence for them and for their students/clients. During their programs of study, candidates engage in and promote authentic learning experiences, support the social and emotional development of students/clients, and demonstrate a commitment to social justice in environments that foster a culture of care, respect for diversity and the dignity of all.

Through careful placement in field-based practica secured in collaboration with the college and its professional development schools and other partners, our candidates learn to plan, act, reflect upon and revise curriculum and service projects. Under the guidance and mentorship of field-based professionals who model the knowledge, skills, and dispositions required to ensure equity in education, our candidates develop the skills and sensitivities necessary to promote social justice and cultivate an appreciation for diversity.

Service provides opportunities for our candidates, faculty, and community partners to actively live-out, and share the knowledge, skills, and dispositions gained in the classroom. In building relationships beyond the classroom, one can seek the greater good (*magis*) in service to others, supporting the potential, and uniqueness of people.

Professionalism

The SEHS seeks to promote a high level of professionalism and to share a mutual commitment to achieve the objectives of all partners.

Candidates benefit from the acquisition of self-reflection as a habit of mind, continuously assessing and refining their professional practice (*The Reflective Practitioner*, Schon, 1983) as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective candidate and/or counseling instruction and assessment, ensuring that all students and/or clients have optimal opportunities to learn and grow (*Professionalism Education*, Schein, 1973).

In the context of coursework, community based research and practice, faculty model and nurture the dispositions required for candidates to develop projects, learn with and from others, form a professional network of colleagues, and assume positions of responsibility.

Bridging theory to practice, candidates are integrated into authentic environments and provided "with real responsibilities, the opportunity to make decisions and to develop skills, to analyze student needs and to adjust practices using student performance data while receiving

continuous monitoring and feedback" from faculty and p-12 mentors (*Transforming teacher education through clinical practice: A national strategy to prepare effective teachers* p10, BRR). Field experience and clinical practice embedded throughout the preparation program provide opportunities for candidates to become contributing and collaborative members of learning communities, and a variety of contexts in which the candidate can develop complex analytical and practical skills (*Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*, p. 10 BRR). Candidates understand that their decisions, actions, and reactions are context dependent and student/client driven. As professionals, they involve colleagues, parents and the community in the responsible care and development of each participant.

Candidates are encouraged to embark on a lifelong commitment to their profession. They are encouraged to join professional organizations and actively participate in professional conferences and research (*Collaboration, Community, and Communication: Modes of Discourse for Teacher Research*, Donoahue, 1996; *Reliving the learning: Learning from classroom talk and texts*, Patterson, 1996; *Teachers as researchers: Reflection and action*, Patterson, Santa, Short, & Smith, 1993). As professionals in their fields, Canisius College candidates will internalize the processes of reflective practice, and utilize multiple sources of information to inform educational decision-making that meets the needs of the individuals and communities in which they are engaged. Effective leaders, make these ethical choices in a spirit of *cura personalis*, when perhaps less socially responsible decisions might be easier.

Effective instructional planning demonstrates the candidate's ability to integrate outcome-based, state, national, and professional standards in their instruction. Assessment driven instruction is evidenced in classroom practice.

Leadership

Candidates 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 (*Effective teaching methods*, Borich, 1996).

Candidates accept that, as professionals, they are responsible for the long-term social and ethical implications of their performance and decision-making. The unit recognizes that the professionals it prepares for the future must be able to effectively use technology, analyze situations, set appropriate and attainable goals, as well as plan and monitor actions that will lead to the accomplishment of these goals. They must be able to efficiently evaluate results, reflect on outcomes, and use their conclusions to improve practice. Throughout this activity candidates must maintain the standards of professional conduct (*Staff development, innovations, and institutional development*, Fullan, 1990).

Through coursework, field experiences and clinical practice, candidates learn that reform is ongoing and best accomplished by committed and well-informed practitioners (*Synthesis of research on good teaching*, Porter & Brophy, 1988). Coursework continuously presents research bases for theories and practice and develops candidates' vision of themselves as change agents responsible for contributing to the body of knowledge in their field. Those directly and indirectly involved believe that each candidate must be prepared as a leader whose professional growth is ongoing and characterized by a spirit of service, professionalism, and advocacy.

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.

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. Through the assessment system 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; and (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 New 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 any 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: SAT score; high school GPA

Assessment at Transition Point 2 — Prior to clinical practice:

Successful final portfolio review (specific program courses)

- Cumulative GPA of 2.5 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 2.0 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 2.0 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 are required to develop a professional portfolio during their program of study. Specific common assignments from selected courses are compiled into an assessment portfolio on Taskstream through which the candidate demonstrates successful performance according to the standards of professional organizations and the Interstate New Teacher Assessment and Support Consortium (INTASC). In addition, TaskStream supports the development of a showcase portfolio for future job searches. Please refer to the Undergraduate Student Handbook and the Program Portfolio Guidelines Handbook for more information.

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. Please use the following link for the most up to date testing requirements:

http://www.nystce.nesinc.com/NY_annProgramUpdate.asp

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 at 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 following link: <http://www.canisius.edu/education/outcomes/>

PROGRAM OF STUDY

ACCOUNTING

ACCOUNTING

(120 Hours and 150 Hours)

Accounting Information Systems

Chair: Ian J. Redpath, JD, LL.M

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 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. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/ugrad-accounting/>

Degree Programs (120 credit hours)

1. Four-Year Undergraduate Program leading to the degree of BS in Business Administration (Major: Accounting/CPA Track). Graduates of this program generally meet the education requirements for the New York State CPA license.
2. Four-Year Undergraduate Program leading to a BS in Business Administration (Major: Accounting Information Systems). Graduates of this program are eligible for a number of certifications such as Certified Information Systems Auditor (C.I.S.A.).
3. Four-Year Undergraduate Program leading a BS in Business Administration (Major Accounting/Non-CPA Track). Graduates of this program generally do not meet the education requirements for the New York State CPA license.

Degree Programs (fulfilling the 150 hour requirement)

1. 150-Hours Program, BS in Business Administration (Major: Accounting) at the end of four years of study and an MBA in Accounting (MBAA) at the end of the fifth year. This program meets the education requirements of the state of New York for CPA licensure. This program usually takes 5 years but with proper planning could be completed in 4-1/2 years. The program is designed so that most students are generally able to sit for the CPA exam in New York after 4 years. New York, like most states, requires 150 hours of study to obtain a CPA license.

Students must apply to the MBAA during their junior year. Admission to the MBAA program is evaluated by an accounting admissions committee. Students admitted to the program generally meet the following criteria:

- a. $100 \times \text{overall GPA} + 100 \times \text{accounting GPA} + \text{GMAT score} = 1100$; and
- b. a minimum cumulative average of 2.75 in all accounting courses taken at Canisius, including all junior accounting courses; and
- c. a minimum cumulative overall average of 3.0 by the second semester of the junior year; and
- d. a minimum score of 500 on the GMAT.

Note: While applicants should not have any scores that are below the minimum in each category, meeting the minimum scores in all categories does not meet the 1100 required, so a minimum in one category needs to be offset with a higher score in another category.

2. 150 Hours BS in Business Administration (Major: Professional Accounting). This program meets the education requirements of the state of New York for CPA licensure. This program usually takes 5 years but with proper planning could be completed in 4 1/2 years. The program is designed so that most students are generally able to sit for the CPA exam in New York after 4 years. New York, like most states, requires 150 hours of study to obtain a CPA license.

PROGRAM OF STUDY

ACCOUNTING

3. Master of Science (MS) in Forensic Accounting. This program meets the education requirements of the state of New York for CPA licensure and is described in the Graduate Catalog. Students must apply during their senior year and will complete this program as a graduate program in a 5th year. Generally students do not start taking MBA classes in the senior year, but students on track to complete the BS with more than 120 credit hours may take graduate level courses in their senior year. Students meeting the requirements to take graduate courses in their senior year, must apply as a junior. Admission to the Forensic program is evaluated by an admissions committee. Students accepted to the program generally meet the following criteria:

- a. 100x overall GPA + 100 x accounting GPA + GMAT score = 1100 and;
- b. a minimum cumulative average of 2.75 in all accounting courses taken; and;
- c. a minimum cumulative overall average of 3.0 by the second semester of the junior year and;
- d. a minimum score of 500 on the GMAT.

Note: While applicants should not have any scores that are below the minimum in each category, meeting the minimum scores in all categories does not meet the 1100 required, so a minimum in one category needs to be offset with a higher score in another category.

Flexibility

Students do not have to make a decision as to which accounting program to pursue until their junior year.

Note: Program is subject to change to meet State standards.

Requirements for Graduation

To qualify for graduation with a BS degree in Business Administration with a major in Accounting, a candidate must complete all the graduation requirements outlined in this catalog and must have a cumulative average of 2.0 in all accounting courses taken at Canisius College as well as an overall GPA of at least 2.0.

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/ugrad-accounting/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in Accounting Information Systems. All students must complete a minimum of 120 credit hours to graduate with an undergraduate degree. The exception is the 150 bachelor's degrees described above.

Advisement

All students should have an advisor in the major and should contact the department to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Three credit hours of free electives must be completed for the four year undergraduate accounting and accounting information systems majors. Students may graduate with more but not less than 120 credit hours.

Requirements for Graduation

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in Accounting. All students must complete a minimum of 120 credit hours to graduate with an undergraduate degree. To graduate with an MBA degree in Accounting, a cumulative overall GPA of 3.0 (scale of 4.0) is required in the graduate program.

PROGRAM OF STUDY

ACCOUNTING

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/ugrad-accounting/learning-goals-objectives/>

Qualifications

Students in the 150-Hour Program will graduate with a BS degree in business administration (major Accounting) at the end of their senior year. To graduate with a degree of MBA in Accounting, a cumulative overall GPA of 3.0 (scale of 4.0) is required in the graduate program.

Advisement

All students should have an advisor in the major and should contact the Accounting Department chairperson directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach the minimum number of 150 combined undergraduate (102) and graduate (48) credit hours for graduation. Zero or three undergraduate and six MBA credit hours of free electives must be completed for this major. Students may graduate with more but not less than 150 credit hours.

Re-taking 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.

Common body of business knowledge:		
Course	Title	Credits
MAT 105	Finite Mathematics	3
MAT 106	and Calculus for the Non-Sciences	3
MAT 111	or Calculus I	3
MAT 115	or Calculus for Business I	4
	Arts and Sciences Elective	3
ENG 389	Business Communications	3
ACC 211	Principles of Accounting I	3
ACC 212	Principles of Accounting II	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 255	Business Statistics I	3
ECO 256	Business Statistics II	3
FIN 201	Introduction to Finance	3
ISB 101	Management Technology	3
MGT 101	Introduction to Management	3
MGT 325	Operations Analysis for Business	3
MGT 446	Managerial Policy Strategy	3
MKT 201	Principles of Marketing	3
	Business International Requirement	6

PROGRAM OF STUDY
ACCOUNTING

**150 Hours BS in Business Administration
(Major: Professional Accounting)**

Course Requirements: In addition to the common liberal arts and business courses, students in this program will take:

Course	Title	Credits
ACC 301-302	Intermediate Accounting I and 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	Audit Theory and Practice	3
ACC 426	Information Systems Auditing	3
ACC 451	Seminar in Accounting Theory	3
LAW 371	Business and Commercial Law	3
LAW 372	Business Organizations and Commercial Paper	3
	Accounting Elective	3
	Business Elective	3
	Free Electives	18
	Total	150-151

PROGRAM OF STUDY
ACCOUNTING

Typical Schedule: 150 Hours BS in Business Administration (Major: Professional Accounting)

Fall	Credits	Spring	Credits
Freshman		Freshman	
FYS 101	3	ENG 101	3
MAT 105 or MAT 111 or MAT 115	3 or 4	PHI 101	3
ECO 101	3	MAT 106 or Elective	3
RST 101	3	ECO 102	3
Business International Requirement	3	Business International Requirement	3
Total	15 or 16	Total	15
Sophomore		Sophomore	
MGT 101	3	MKT 201	3
ACC 211	3	ACC 212	3
ECO 255 (Statistics I)	3	ECO 256 (Statistics II)	3
ISB 101	3	ACC 307	3
Field of Knowledge 4 - History	3	Field of Knowledge 3 - Arts	3
Total	15	Total	15
Junior		Junior	
ACC 301	3	ACC 302	3
ACC 303	3	ENG 389	3
FIN 201	3	A&S Elective	3
LAW 371	3	Field of Knowledge 2 - Philosophy*	3
Field of Knowledge 1 - Religion	3	LAW 372	3
Field of Knowledge 6 - Science	3		3
Total	18	Total	15
Senior		Senior	
MGT 325	3	ACC 416	3
ACC 415	3	ACC 425	3
ACC 421	3	MGT 446	3
ACC 451	3	A&S Elective	3
Core Capstone	3	A&S Elective	3
Total	15	Total	15
Fifth Year		Fifth Year	
ACC 426	3	ACC Elective**	3
BUS Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
Free Elective	3		
Total	15	Total	12
		Total	150-151

* Ethics course

**ACC 429 or 441 recommended

PROGRAM OF STUDY
ACCOUNTING

150-Hours Program, BS in Business Administration (Major: Accounting)/MBA in Accounting (MBAA)

Course Requirements: In addition to the common liberal arts and business courses, students in this program will take:

Course	Title	Credits
ACC 301-302	Intermediate Accounting I and II	6
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
	Total	

Graduate Portion

Course	Title	Credits
MBA 502	Organizational Behavior	3
MBA 507	Operations	3
MBA 508	Corporate Finance	3
MBA 620/621	Finance Elective	3
MBA 630	Marketing	3
MBA 641	Human Resources	3
MBA 690	Strategic Management	3
MBA 715	Basic Taxation	3
MBA 716	Advanced Taxation	3
MBA 721	Advanced Financial Reporting	3
MBA 725	Auditing Theory and Practice	3
MBA 726	Information Systems Auditing	3
MBA 729	Not for Profit Accounting	3
MBA 751	Accounting Theory and Research	3
MBA Elective		3
	Total	150-151

Note: Students do not take MGT 325 or 446

PROGRAM OF STUDY
ACCOUNTING

**Typical Schedule: 150-Hours Program, BS in Business Administration
(Major: Accounting)/MBA in Accounting (MBAA)**

Fall		Spring	
Freshman	Credits	Freshman	Credits
FYS 101	3	ENG 101	3
MAT 105 or MAT 111 or MAT 115	3 or 4	PHI 101	3
ECO 101 (Macro)	3	MAT 106 or Elective	3
RST 101	3	ECO 102 (Micro)	3
Business International Requirement	3	Business International Requirement	3
Total	15 or 16	Total	15
Sophomore		Sophomore	
MGT 101	3	MKT 201	3
ACC 211	3	ACC 212	3
ECO 255 (Statistics I)	3	ECO 256 (Statistics II)	3
ISB 101	3	ACC 307	3
Field of Knowledge 4 - History	3	Field of Knowledge 3 - Arts	3
Total	15	Total	15
Junior		Junior	
ACC 301	3	ACC 302	3
ACC 303	3	ENG 389	3
FIN 201	3	A&S Elective	3
LAW 371	3	LAW 372	3
Field of Knowledge 1 - Religion	3	Field of Knowledge 2 -	3
Field of Knowledge 6 Science	3	Philosophy	
Total	18	Total	15
Senior		Senior	
MBA 715	3	MBA 716	3
MBA 721	3	MBA 725	3
MBA 751	3	MBA 507	3
Core Capstone	3	MBA 690	3
A&S Elective	3	A&S Elective	3
Total	15	Total	15
Fifth Year		Fifth Year	
MBA Elective	3	MBA 620/621	3
MBA 726	3	MBA 641	3
MBA 502	3	MBA 729	3
MBA 508	3	MBA elective	3
MBA 630	3		
Total	15	Total	12
		Total	150-151

* Ethics course

PROGRAM OF STUDY
ACCOUNTING

**120 hours - BS in Business Administration
(Major: Accounting Information Systems)**

Course Requirements: In addition to the common liberal arts and business courses, students in this program will take:

Course	Title	Credits
ACC 301	Intermediate Accounting I	3
ACC 303	Cost Accounting	3
ACC 307	Accounting Information Systems	3
ACC 331	E-Business	3
ACC 340	Database Management	3
ACC 426	Information Systems Auditing	3
ACC 452	Enterprise Systems	3
MGT 370	Managerial Environment	3
	Free Electives	6-9
Total		120-121

PROGRAM OF STUDY
ACCOUNTING

**Typical Schedule: 120 hours - BS in Business Administration
(Major: Accounting Information Systems)**

Fall		Spring	
Freshman	Credits	Freshman	Credits
FYS 101	3	ENG 101	3
MAT 105 or MAT 111 or MAT 115	3 or 4	PHI 101	3
ECO 101 (Macro)	3	MAT 106 or Elective	3
RST 101	3	ECO 102 (Micro)	3
Business International Requirement	3	Business International Requirement	3
Total	15 or 16	Total	15
Sophomore		Sophomore	
MGT 101	3	MKT 201	3
ACC 211	3	ACC 212	3
ECO 255	3	ECO 256 (Statistics)	3
ISB 101	3	ACC 307	3
Field of Knowledge 4 - History	3	Field of Knowledge 3 - Arts	3
Total	15	Total	15
Junior		Junior	
ACC 301	3	ACC 331	3
ACC 303	3	ENG 389	3
FIN 201	3	A&S Elective	3
Field of Knowledge 1 - Religion	3	Field of Knowledge 2 - Philosophy*	3
Field of Knowledge 6 - Science	3	A&S Elective	3
Total	15	Total	15
Senior		Senior	
ISB 340	3	ACC 452	3
ACC 426	3	MGT 446	3
MGT 325	3	Free Elective	3
MGT 370	3	Free Elective	3
Core Capstone	3	A&S Elective	3
Total	15	Total	15
		Total	120-121

*Ethics Required

PROGRAM OF STUDY
ACCOUNTING

**120 Hours — BS in Business Administration
(Major: Accounting)**

Course Requirements: In addition to the common liberal arts and business courses, students in this program will take:

Course	Title	Credits
ACC 301-302	Intermediate Accounting I and II	6
ACC 303	Cost Accounting	3
ACC 307	Management and Accounting Information Systems	3
ACC 415	Basic Taxation	3
ACC Electives	Elective course in accounting	3
LAW 371	Business and Commercial Law	3
LAW 372	Business Organizations and Commercial Paper	3
Free Electives		3-6
Total		120-121

PROGRAM OF STUDY
ACCOUNTING

Typical Schedule: 120 Hours – BS in Business Administration (Major: Accounting)

Fall		Spring	
Freshman	Credits	Freshman	Credits
FYS 101	3	ENG 101	3
MAT 105 or MAT 111 or MAT 115	3 or 4	PHI 101	3
ECO 101 (Macro)	3	MAT 106 or Elective	3
RST 101	3	ECO 102 (Micro)	3
Business International Requirement	3	Business International Requirement	3
Total	15 or 16	Total	15
Sophomore		Sophomore	
MGT 101	3	MKT 201	3
ACC 211	3	ACC 212	3
ECO 255	3	ECO 256 (Stat)	3
ISB 101	3	ACC 307	3
Field of Knowledge - History	3	Field of Knowledge 3 - Arts	3
Total	15	Total	15
Junior		Junior	
ACC 301	3	ACC 302	3
ACC 303	3	ENG 389	3
FIN 201	3	A&S Elective	3
Field of Knowledge 1 – Religion	3	Field of Knowledge 2 - Philosophy*	3
Field of Knowledge 6 - Science	3	A&S Elective	3
Total	15	Total	15
Senior		Senior	
ACC 415	3	ACC elective	3
ACC elective	3	LAW 372	3
A&S Elective	3	MGT 325	3
Capstone	3	MGT 446	3
LAW 371	3	Elective	3
Total	15	Total	15
		Total	120-121

* Ethics Course

Business International Requirement

PROGRAM OF STUDY

ACCOUNTING

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. All business majors must complete a two course sequence of classes that emphasize either a modern language or a non-U.S. culture. If students elect to satisfy the requirement by taking language courses, the courses must be in the same modern language. 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. Both classes must be related to the same culture (e.g. two courses about Asian history, two courses about European culture, two Latin American or Hispanic courses, etc.) 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.

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Many students choose to dual major in Accounting and Accounting Information Systems. 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 credit hour degree requirements for this program, but 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 the appropriate associate dean.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. Some majors and minors can be completed within the minimum credit hour degree requirements for this program, but in some cases additional course work may be required. Students must complete the appropriate minor request form.

Note: Students do not have to make a decision which accounting program to pursue until their junior year. For additional information regarding the MBA in Accounting and Master of Science in Forensic Accounting refer to the Graduate Catalog. Programs are subject to change to meet State standards.

2015 – 2017 ACCOUNTING COURSES

ACC 201 Financial Accounting **3 credits**

Introduction to accounting concepts for external financial reporting. Accounting theories and principles relative to asset and liability valuations, and income determination.
Fall/Spring

ACC 202 Managerial Accounting **3 credits**

Introduction to accounting concepts for internal reporting and control. Cash budgeting, decision making, capital budgeting, tax aspects of managerial planning and performance evaluation. Prerequisite: *ACC 201 Fall/Spring*

ACC 210 Accounting Procedures Seminar **0 credits**

In-depth review of basic accounting procedures underlying the preparation of financial statements. Coverage of accounting cycle with emphasis on adjusting entries and error analysis. Required for students who have not taken ACC 211 at Canisius. Prerequisite: Concurrent registration in ACC 301.

ACC 211-212 Principles of Accounting I and II **6 credits**

Fundamental concepts and procedures of financial and managerial accounting with emphasis on asset and liability valuations, income determination and cash flows. Accounting applications of present value concepts, introduction to budgeting and product costing. For Accounting majors. Prerequisites: For ACC 212, a minimum of a C in ACC 211, Students who have taken ACC 201 or transfer in with its equivalent, with a B+ or better and permission of the Department Chair (this is within the discretion of the Chair and is only granted on a case by case basis). ACC 211 Fall/Spring, ACC 212 Spring, The department offers ACC 212PD 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.

PROGRAM OF STUDY

ACCOUNTING

ACC 301-302 Intermediate Accounting I and II 6 credits

In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liabilities, income determination and cash flows. Prerequisites: ACC 211-212, junior standing and overall GPA of 2.0 and a C or better in both ACC 211 and ACC 212. Students who took ACC 201 or transfer students with a B+ or better and permission of the Department Chair (this is within the discretion of the Chair and is only granted on a case by case basis) may enroll in ACC 301 only if they enroll in ACC 210. ACC 301 *Fall/Spring*, ACC 302 *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. Prerequisites: ACC 211-212, junior standing and overall GPA of 2.0. *Fall/Spring* 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.

ACC 307 Accounting Information Systems 3 credits

Development, organization, and implementation of accounting and management information systems. Emphasis on systems controls, processing cycles, and systems development life cycle. Prerequisites: ACC 211 and ISB 101. *Fall/Spring*

ACC 331 E-Business 3 credits

Challenges and strategies in electronic mediated business such as; electronic business relationships; electronic payment systems; virtual supply chains; product development strategies; legal security and privacy issues. Evaluation and construction of electronic business web sites through case studies and projects. Prerequisites: ACC 307 or concurrent registration. *Spring*

ACC 340 (ISB 340) Database Management 3 credits

Design and use of database management systems through host languages and user query languages. Data structures; database design; database access methods; alternate data models; database administration. Prerequisites: ACC 307 and ISB 101. *Fall*

ACC 415 Basic Taxation 3 credits

Provisions of Internal revenue Code affecting individuals and corporations; tax factors in planning and decision making; social, political and economic considerations underlying tax laws. There will be an emphasis on learning research and communications skills. Students will learn to prepare various business and accounting correspondence including, reports, memorandums, client and engagement letters. Prerequisite: ACC 211 and ACC 212 with a C or better in both courses. *Fall*

ACC 416 Advanced Taxation 3 credits

Internal Revenue Code provisions relating to taxation of corporations and shareholders; partnerships and partners including organization, reorganization, distribution and liquidation. Emphasis on Sub-Chapters "C," "S" and "K." Course includes learning oral and written presentations skills and techniques. Prerequisite: A minimum of a C in ACC 415. *Spring*

ACC 421 Advanced Accounting Problems 3 credits

Problem-solving techniques relative to mergers and consolidations; organization and liquidation of partnerships; introduction to fiduciary accounting for receivers, trusts and estates. Prerequisite: A minimum of a C in ACC 302. *Fall*

ACC 425 Auditing Theory and Practice 3 credits

Generally accepted auditing standards, internal control, professional liability of auditors, ethics of the profession, statistical sampling and the auditor's report. Prerequisite: A minimum of a C in ACC 302. *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. Prerequisites: A minimum of a C in each of ACC 307 and ACC 331 or ACC 452 or ACC 425. *Fall*

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. Prerequisites: A minimum of a C in each of ACC 301/302, ACC 425 or ACC 426. *Fall*

PROGRAM OF STUDY

ACCOUNTING

ACC 429 Not For Profit **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. *Spring*

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, extensive database research to support or oppose accounting positions and library research culminating in a research paper or class presentation. The course will also provide instruction in business/accounting written and oral communication. Prerequisite: A minimum of a C in ACC 302. *Fall*

ACC 452 Enterprise Systems **3 credits**

Measuring the value of enterprise information; enterprise resource planning (ERP) system design and functionality; international accounting systems issues; data integrity; use of financial and non-financial information for corporate decision-making. Prerequisite: A minimum of a C in ACC 307. *Spring*

ACC 499 Independent Research in Accounting **3 credits**

Undertaking of a significant piece of independent research. By appointment with chairperson. *Fall/Spring*

LAW 371 Business and Commercial Law **3 credits**

American legal system and substantive law of contracts, agency, bailments, sales, products liability. Uniform Commercial Code and cases. *Fall*

LAW 372 Business Organizations and Commercial Paper **3 credits**

Legal aspects of partnerships and corporations; advantages and disadvantages of each, together with commercial paper under Uniform Commercial Code; trade regulation; bankruptcy. Prerequisite: A minimum of a C in LAW 371. *Spring*

PROGRAM OF STUDY ADOLESCENCE EDUCATION

ADOLESCENCE EDUCATION

Chair: Michele Marable, PhD

Introduction

The professional sequences in Adolescence Education give the prospective teacher 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. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to: <http://www.canisius.edu/teacher-ed/adolescence-ed/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to: <http://www.canisius.edu/teacher-ed/adolescence-ed/learning-goals/>

Qualifications

Academic criteria for endorsement and completion of the program are as follows: Students must maintain a cumulative GPA of 2.5 or higher and a grade of C or higher in content and pedagogical courses. They must achieve satisfactory performance in field placements and have a successful portfolio review. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students will be assigned an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. 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, students will be assigned an advisor in their respective concentration area.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses that may be selected in addition to the Core Curriculum, major and concentration requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours. Free electives may not be available for all concentrations.

Major Courses

The Adolescence Education Major includes the following required courses:

Course	Title	Credits
EDS 101	Human Growth and Social Development: Adolescence	3
EDS 223	Foundations of Adolescent Literacy	3
EDS 224	Adolescent Literacy in New Literacies World	3
EDU 250	Foundations of Education	3
SPE 341	Inclusive Strategies	3
EDS 360	Evaluation and Teaching Strategies	3
EDS 390	Cognition, Learning and Assessment of Adolescents	3
EDS 402-406	Methods of Teaching in the Content Area (choose the appropriate course)	3
EDS 432-436	Applied Methods of Teaching in the Content Area (choose the appropriate course)	3
EDS 493	Supervised Student Teaching	12
EDS 494	Capstone Seminar for Adolescence Education 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)	0
EDU 498	Student Teaching Seminar	3

PROGRAM OF STUDY

ADOLESCENCE EDUCATION

Major Electives

Candidates wishing to obtain an extension to teach grades 5-6 in their area of concentration must take EMC 352 Human Growth and Social Development: Middle Childhood (3 credits) and EMC 391 Cognition, Learning, Assessment and Diagnostic Teaching: Middle Childhood (3 credits) in addition to the courses listed above.

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. EDS 224 has a 20 hour field experience, EDS 360 has a 30 hour field experience and EDS 432-436 (choose the appropriate course) hosts the final 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 student in their EDS 432-436 course.

Academic Concentration

Candidates choose from the following areas of certification: Biology, Chemistry, Physics, Mathematics, English, Social Studies, French, German or Spanish. Required courses in these content areas are listed here: <http://www.canisius.edu/teacher-ed/adolescence-ed/>

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be

found under the Academic Curricula section of the catalog. 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.

2015 – 2017 ADOLESCENCE EDUCATION (GRADES 7-12) COURSES

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.

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. (Attribute: Advanced Writing Intensive)

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.

EDS 370 Teaching 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.

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.

PROGRAM OF STUDY

ADOLESCENCE EDUCATION

EDS 390 Cognition, Learning and Assessment of Adolescents **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.

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. Prerequisite: EDS 360.

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.

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.

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.

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. (Attribute: Oral Communication)

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. (Attribute: Oral Communication)

PROGRAM OF STUDY ADOLESCENCE EDUCATION

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. (Attribute: Oral Communication)

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. (Attribute: Oral Communication)

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. (Attribute: Oral Communication.)

EDS 493 Supervised Student Teaching **9 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. Prerequisites: Overall GPA of 2.50 to date, "C" in each required subject area course (modern language majors must also pass oral proficiency interview), "C" in each required Education course, interview, EDS 494. Some schools may require certain health tests.

EDS 494 Capstone Seminar for Adolescence Education Teacher Candidates **3 credits**

This seminar will be the culminating course that complements student teaching for adolescence education majors. EDS 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.

EDU 122 Technology in Education **3 credits**

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.

EDU 250 Foundations of Education **3 credits**

This course introduces the historical, sociological, philosophical, and organizational foundations of education in the United States. Topics include a broad overview of teaching as a profession, an understanding of the role of education in a democratic society, diversity and social justice, home/school/community relationships, educational reform and other current issues in education. (Attribute: Justice.)

EDU 410 Teaching 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.

EDU 415 Grammar and Language Study for Teachers **3 credits**

Addresses instruction in English grammar for students who will be teaching English Language Arts, as well as instruction in the history and structure of the English language. The course focuses on the study of the eight parts of speech and skills required for effective sentence construction. In addition, students will be exposed to the study of the history of language and how language functions in our lives. Students will focus on how these two aspects of ELA are taught in the schools. Open to all Education and Adolescence Education concentrations.) (Attribute: Advanced Writing Intensive.)

EDU 495 Child Abuse Workshop **0 credits**

Mandatory training by NY State Education Department for teacher certification. Held during the student teaching seminar.

PROGRAM OF STUDY
ADOLESCENCE EDUCATION

EDU 496 Prevention of School Violence

Workshop 0 credits

Mandatory training by NY State Education Department for teacher certification. Held during the student teaching seminar.

EDU 497 Dignity for All Students Act (DASA) 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.

EMC 352 Human Growth and Social Development: Middle Childhood 3 credits

Major concepts, principles, theories and research related to the intellectual, emotional, physical, social and moral development of young adolescents. Emphasis on contemporary issues related to middle childhood development.

EMC 391 Cognition, Learning, Assessment and Diagnostic Teaching: Middle Childhood 3 credits

Concepts, standards and research related to middle level curriculum development stressing the importance of a curriculum that is relevant, challenging, integrative and exploratory. Interdisciplinary middle level curriculum standards and models will be introduced in addition to assessment strategies that promote the continuous intellectual, social and physical development of all young adolescents.

SPE 341 Inclusive Strategies 3 credits

Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration.

PROGRAM OF STUDY

ANIMAL BEHAVIOR, ECOLOGY, AND CONSERVATION

ANIMAL BEHAVIOR, ECOLOGY,
AND CONSERVATION

Chair: Michael Noonan, PhD

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 <http://www.canisius.edu/abec/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/abec/learning-goals-objectives/>

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. 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 to arrange this. Students should work with their advisors in developing their academic program and planning their co-curricular or supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

The ABEC major requires 7 courses, plus a total of 24 additional credits from elective courses:

Required courses are:		
Course	Title	Credits
ABEC 101	Introductory Animal Behavior I	3
ABEC 102	Introductory Animal Behavior II	3
BIO 111	Intro to Bio I w lab	4
BIO 112	Intro to Bio II w lab	4
BIO 322 or ABEC 333 or ABEC 337	Conservation	3-4
MAT 141 or PSY 201	Statistics	3
PHI 245	Animal Ethics	3

PROGRAM OF STUDY
ANIMAL BEHAVIOR, ECOLOGY, AND CONSERVATION

Major Electives

Twenty four credits must derive from the following electives:

Course	Title	Credits
ABEC 220	Animal Learning	4
ABEC 251	Zoo Animal Management	3
ABEC 301	Research Participation	1
ABEC 332	Animal Welfare	3
ABEC 333	Conservation Behavior	3
ABEC 337	Conservation Psychology & Environmental Education	4
ABEC 338	Recreational Ecology	4
ABEC 339	Animal Enrichment	3
ABEC 340	Research Methods in Animal Behavior	4
ABEC 341	Urban Ecology	3
ABEC 351	Zoo Exhibitory	1
ABEC 360	Observational Research Methods	4
ABEC 363	Canine Evolution, Behavior, Cognition	3
ABEC 370	Animal Cognition	3
ABEC 404	Wildlife Ecology and Conservation in South Africa	3
ABEC 490	Canisius Ambassadors for Conservation	3
ABEC 491	Internship I	3
ABEC 492	Internship II	3
ABEC 495	Research Seminar	3
ABEC 499	Independent Study	3

BIO 301	Research Methods	1
BIO 312	Primateology	3
BIO 316	Social Organization of Mammals	4
BIO 317	Sex, Evolution and Behavior	3
BIO 320	Field Ecology	4
BIO 322	Conservation Biology	3
BIO 325	Reproductive Biopsychology	3
BIO 343	Entomology	4
BIO 355	Behavioral Neuroscience	3
BIO 365	Vertebrate Zoology	4
BIO 366	Ornithology (or BIO166)	4
BIO 375	Community Ecology	3
BIO 377	Freshwater Biology	4
BIO 378	Wetlands	3

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.

PROGRAM OF STUDY
ANIMAL BEHAVIOR, ECOLOGY, AND CONSERVATION

Recommended Semester Schedule for Major Course Requirements:

Fall	Credits	Spring	Credits
Freshman		Freshman	
ABEC 101 BIO 111 and Lab FYS 101 PHI 101 Core Field/attribute requirement		ABEC 102 BIO 112 and Lab ENG 101 RST 101 Core Field/attribute requirement	
Sophomore		Sophomore	
BIO 316 (ABEC elective) Core Field/attribute requirement Core Field/attribute requirement MAT 141 or PSY 201 Free elective		BIO317 (ABEC elective) Core Field/attribute requirement Core Field/attribute requirement PHI 245 Free elective	
Junior		Junior	
ABEC elective ABEC Elective Free elective or Core Field/attribute requirement Free elective Free elective		ABEC elective ABEC elective Conservation course Free elective Free elective	
Senior		Senior	
ABEC elective Free elective Free elective Free elective Free elective		ABEC elective Core Capstone Free elective Free elective Free elective	

PROGRAM OF STUDY

ANIMAL BEHAVIOR, ECOLOGY, AND CONSERVATION

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from 6-8 required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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. The ABEC program offers three minors for students who wish to concentrate in specific areas:

The Anthrozoology Minor (18 credits)

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.

One required course:

Course	Title	Credits
ABEC 419	Anthrozoology	3
Plus fifteen credits from any of the following courses:		
ABEC 330	Animals, Public Policy and the Law	3
ABEC 332	Animal Welfare	3
ABEC 335	Urban Ecology	3
ABEC 336	Child Animal Studies	3
ABEC 337	Conservation Psychology & Environmental Education	4
ABEC 338	Recreational Ecology	4
ABEC 363	Canine Evolution, Behavior and Cognition	3
ABEC 490	Canisius Ambassadors for Conservation	3
ABEC 491A	Internship (Anthrozoology)	3
ABEC 492A	Internship (Anthrozoology)	3
ABEC 495	Research Seminar (Anthrozoology Project)	3
PHI 245	Animal Ethics	3
RST 229	Religious Perspectives on Animals	3
ENG 285	Writing and Animal Studies	3

PROGRAM OF STUDY
ANIMAL BEHAVIOR, ECOLOGY, AND CONSERVATION

The Zoo Biology Minor (18 credits)

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.

One required course:

Course	Title	Credits
ABEC 251	Zoo Animal Management	3
Plus fifteen credits from any of the following courses:		
ABEC 220	Animal Learning	4
ABEC 332	Animal Welfare	3
ABEC 337	Conservation Psychology & Environmental Education	4
ABEC 339	Animal Enrichment	3
ABEC 351	Zoo Exhibitory	1
ABEC 360	Observational Research Methods	4
ABEC 491Z	Internship (Zoo/Aquarium based)	3
ABEC 492Z	Internship (Zoo/Aquarium based)	3
ABEC 495	Research Seminar (Zoo-based project)	3
BIO 150	Animal Nutrition	3

The Animal Behavior Minor (18 credits)

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.

Two required courses:

Course	Title	Credits
ABEC 101	Introductory Animal Behavior I	3
ABEC 102	Introductory Animal Behavior II	3
Plus 12 credits from any of the following courses:		
ABEC 220	Animal Learning	4
ABEC 332	Animal Welfare	3
ABEC 333	Conservation Behavior	3
ABEC 339	Animal Enrichment	3
ABEC 340	Research Methods in Animal Behavior	4
ABEC 360	Observational Research Methods	4
ABEC 363	Canine Evolution, Behavior and Cognition	3
ABEC 370	Animal Cognition	3
ABEC 404	Wildlife Ecology and Conservation in South Africa	3
ABEC 491B	Internship (Animal Behavior)	3
ABEC 492B	Internship (Animal Behavior)	3
ABEC 495	Research Seminar (Animal Behavior Project)	3
BIO 366	Ornithology	4
BIO 312	Primateology	3
BIO 316	Social Organization of Mammals	3

For all 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.

PROGRAM OF STUDY

ANIMAL BEHAVIOR, ECOLOGY, AND CONSERVATION

2015 – 2017 Animal Behavior, Ecology and Conservation Courses

ABEC 101 Introductory Animal Behavior I **3 credits**

Behavior across a wide range of species. Similarities and contrasts allow deductions regarding mechanisms and evolution.

ABEC 102 Introductory Animal Behavior II **3 credits**

Behavior across a wide range of species. Similarities and contrasts allow deductions regarding mechanisms and evolution.

ABEC 220 Animal Learning with Lab **4 credits**

Animal learning and memory research with emphasis on practical animal training. (Lab required)

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.

ABEC 301 Research Participation

Recognition for ABEC research assistants. (counts 3 times max)

ABEC 330 Animals, Public Policy, and the Law **3 credits**

This course provides an overview of both law and public policy as they impact modern societies' views and treatment of non-human animals. Students will explore American and other national legal systems, as well as several different senses of the term "public policy" in connection with companion animals, wildlife, research animals, and food animals.

ABEC 332 Animal Welfare **3 credits**

The scientific study of assessing the welfare of captive animals. Use of quantitative research to improve welfare. (Advance Writing Attribute)

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.

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.

ABEC 337 Conservation Psychology & Environmental Education **3 credits**

The theoretical foundations of conservation psychology, including ecological approaches to human development, cognition, morality, sociality, emotion, and behavior. Assessing attitude and behavioral outcomes of conservation education programs.

ABEC 338 Recreational Ecology **3 credits**

Environmental consequences of outdoor recreation and nature-based tourism activities and their management. History and current state of outdoor recreation, including the policies that have shaped management of natural areas. Positive effects recreation through increased conservation support and stewardship and how both can be managed for coexistence.

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.

PROGRAM OF STUDY

ANIMAL BEHAVIOR, ECOLOGY, AND CONSERVATION

ABEC 340 Research Methods in Animal Behavior **4 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. (Advance Writing Attribute)

ABEC 341 Urban Ecology **3 credits**

Critical examination of animal life in close association with humans in urban environments.

ABEC 342 Animal Geographies **3 credits**

Study of the entangling's of human-animal relations with space, place, location, environment and landscape.

ABEC 351 Zoo Exhibitory **1 credit**

Critical evaluation of zoo design principles. Involves travel to obtain first-hand study of distant zoological institutions.

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. (Hybrid On-line format/Advance Writing Attribute)

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 and cognition.

ABEC 370 Animal Cognition **3 credits**

The mental lives of nonhuman animals. Topics include basic processes (perception, attention), physical cognition (tool use, time and numbers) and social cognition (social learning, cooperation).

ABEC 404 Wildlife Ecology and Conservation in South Africa **3 credits**

Field experience in South Africa, emphasizing field methods for animal observation, and applicability to conservation. (Core Capstone)

ABEC 419 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 human have sorted animals, and a variety of science-based and value-based approaches to humans' inevitable intersection with other living beings. (Core Capstone)

ABEC 490 Canisius Ambassadors for Conservation **3 credits**

Field study of endangered species and ecology, followed by educational outreach to school and public audiences.

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.

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.

ABEC 495 Research Seminar **3 credits**

Independent animal-focused research conducted under the supervision of a faculty member.

ABEC 499 Independent Study **3 credits**

Independent study conducted under the supervision of a faculty member.

PROGRAM OF STUDY

ANIMAL BEHAVIOR, ECOLOGY, AND CONSERVATION

BIO 111 Introduction to General Biology 1	4 credits
BIO 112 Introduction to General Biology 2	4 credits
BIO 150 Animal Nutrition	3 credits
BIO 312 Primatology	3 credits
BIO 316 Social Organization of Mammals	4 credits
BIO 317 Sex, Evolution and Behavior	3 credits
BIO 320 Field Ecology with Lab	4 credits
BIO 322 Conservation Biology	3 credits
BIO 325 Reproductive Biopsychology	3 credits
BIO 343 Entomology	4 credits
BIO 355 Behavioral Neuroscience	3 credits
BIO 365 Vertebrate Zoology	4 credits
BIO 366 Ornithology	3 credits
BIO 375 Community Ecology	3 credits
BIO 377 Freshwater Biology	4 credits
BIO 378 Wetlands	3 credits
ENG 285 Writing and Animal Studies	3 credits
MAT 141 Inferential Statistics (or PSY 201 Behavioral Statistics)	3 credits
PHI 245 Animal Ethics	3 credits
RST 229 Religious Perspectives on Animals	3 credits

PROGRAM OF STUDY ATHLETIC TRAINING

ATHLETIC TRAINING

Chair: Peter M. Koehneke

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. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/athletic-training/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/athletic-training/learning-goals/>

Advisement

All Athletic Training majors are assigned an advisor and should contact the Department of Kinesiology directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY ATHLETIC TRAINING

Major Courses

Course	Title	Credits
BIO 114/L	Human Biology: An Introduction to Anatomy and Physiology (Lab)	4
BIO 115/L	Musculoskeletal Anatomy and Physiology (Lab)	4
ATH 170	Emergency Care and Introduction to Athletic Training	3
HED 205	Wellness and Fitness	3
KIN 235	Kinesiology	3
KIN 336/L	Physiology of Exercise and 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	Diagnosis of Injuries/Illnesses I (Lab)	3
ATH 262	Diagnosis of Injuries/Illnesses II (Lab)	3
ATH 300	General Medical Diagnostics and Interventions	3
ATH 309	Pathophysiology and Pharmacology in A.T.	3
ATH 331	Practicum in Athletic Training	1
ATH 332	Practicum in Athletic Training	1
ATH 342	Therapeutic Modalities (Lab)	3
ATH 343	Therapeutic Exercise (Lab)	3
ATH 361	Sports Psychology	3
ATH 372	Health Issues for Athletic Trainers	3
ATH 373	Nutritional 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

Major Electives

Athletic Training majors should consult their advisor for major electives.

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. <http://www.canisius.edu/athletic-training/>

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.

Additional Course Considerations

Athletic Training majors should consult their advisor for additional course considerations.

PROGRAM OF STUDY
ATHLETIC TRAINING

Recommended Semester Schedule for Major Course Requirements:

Fall	Credits	Spring	Credits
Freshman		Freshman	
BIO 114 and Lab	4	BIO 115 and Lab	4
ATH 170	3	ATH 132	2
FYS 101	3	ENG 101	3
PHI 101	3	RST 101	3
Core	3	Core	3
		Core	3
Total	16	Total	18
Sophomore		Sophomore	
ATH 231	3	ATH 232	3
ATH 261/Lab	4	ATH 262/Lab	4
ATH 342/Lab	4	ATH 343/Lab	4
KIN 235	3	HED 205	3
Core	3	Core	3
Core	3	Core	3
Total	20	Total	20
Junior		Junior	
KIN 336 and Lab	4	ATH 332	1
ATH 309	3	ATH 361	3
ATH 331	1	ATH 373	3
ATH 372	3	ATH 398	3
Core	3	Core	3
Elective	3	ATH 300	3
Total	17	Total	16
Senior		Senior	
ATH 431	3	ATH 482	3
Core	3	ATH 498	3
Core	3	Capstone	3
Elective	3	Elective	3
Elective	3	Elective	3
Total	15	Total	15

PROGRAM OF STUDY ATHLETIC TRAINING

Dual Majors

Athletic Training students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before Athletic Training students declare dual majors, it is important to meet with their academic advisor. Some dual 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 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

Athletic Training students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

The Strength and Conditioning minor is common minor for athletic training 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 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.

Strength and Conditioning Minor Courses:

Course	Title	Credits
BIO 114	Human Biology (Lab)	4
BIO 115	Musculoskeletal Anatomy (Lab)	4
KIN 235	Kinesiology	3
KIN 336	Physiology of Exercise	3
HED 337	Exercise Principles	3
ATH 373	Nutritional Issues for Athletic Trainers or	3
HED 115	Basic Nutrition	3
PED 365	Principles and Philosophy of Coaching	3
KIN 420	Strength and Conditioning Applications	3

Note: Peter Koehneke serves as the Director of the Athletic Training major, and Dr. Karl Kozlowski and Dr. Chuck Pelitera serve as advisors for the Strength and Conditioning minor program in the Department of Kinesiology.

2015 – 2017 ATHLETIC TRAINING 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. Prerequisites: BIO 114 and BIO 114L with a grade of C (2.0) or above and an overall GPA of 2.0. *Spring*

ATH 170 Emergency Care and Introduction to Athletic Training **3 credits**

Recognition and immediate care of common illnesses and injuries. Content meets National Safety Council requirements for Standard First Aid and CPR. *Fall*

ATH 231-232 Practicum in Athletic Training **1-1 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: Acceptance into the Athletic Training Education Program. *Fall/Spring*

PROGRAM OF STUDY
ATHLETIC TRAINING

**ATH 261 Diagnosis of Injuries/Illnesses I 3 credits
1 credit lab**

Theoretical, practical, empirical study of lower extremity, lumbar spine diagnosis. . Prerequisites: ATH 170 and BIO 114 with grades of C or above. Registration concurrent with ATH 231. Lab required. *Fall*

**ATH 262 Diagnosis of Injuries/Illnesses II 3 credits
1 credit lab**

Theoretical, practical, empirical study of upper extremity, thorax, head and cervical spine diagnosis. Includes lab. Prerequisites: ATH 261 and ATH 231 with grades of C or above. Lab required. *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. Prerequisites: ATH 261 and ATH 231 with grades of C or above. *Spring (Alternating 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. Registration concurrent with ATH 231 or ATH 331. *Fall (Alternating Years)*

ATH 331-332 Practicum in Athletic Training 1-1 credits
See ATH 231-232 for description.

**ATH 342 Therapeutic Modalities 3 credits
1 credit lab**

Therapeutic modality use in treatment of orthopedic injuries. Physics, physiological effects, rationale and application of modalities in health care of patients. Practical examinations. Includes lab. Registration concurrent with ATH 231. Lab required. *Fall*

**ATH 343 Therapeutic Exercise 3 credits
1 credit lab**

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. Includes lab. Prerequisite: KIN 235 with a grade of C or above. Registration concurrent with ATH 232. Lab required. *Spring*

ATH 361 Psychology of Sport and Mental Health 3 credits

Review of psychological and sociological processes, principles and problems influencing behavior in sport. Other approved psychology courses may be substituted. *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. *Fall (Alternating Years)*

ATH 373 Nutritional Issues for Athletic Trainers 3 credits

Fundamental theories and practices of nutrition, diet construction and research findings applicable to athletic performance. *Spring (Alternating Years)*

ATH 398 Statistics and Research Design for Athletic Trainers 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: KIN 235 with a grade of C or above. *Fall/Spring*

ATH 431 Practicum in Athletic Training 3 credits
See ATH 231-232 for description. *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. Prerequisites: ATH 261 and ATH 231 with grades of C or above. *Spring (Alternating Years)*

PROGRAM OF STUDY

ATHLETIC TRAINING

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 342 and ATH 343 with grades of C or above, Permission of instructor, application. *Fall/Spring/Summer*

KIN 235 Kinesiology **3 credits**

Scientific study of human movement, emphasizing the basic principles of musculoskeletal anatomy, neuromuscular physiology and biomechanics. Prerequisite: BIO 114 and BIO 115 with a grade of C or above. *Fall/Spring*

KIN 336 Physiology of Exercise **3 credits**

Effects of physical activity on the functioning human body. Restrictions on levels of physical activity by normal metabolic limitations. Lab required (KIN 336L) for Athletic Training and Health and Wellness majors. Prerequisite: BIO 115 with a minimum grade of C. *Fall/Spring/Summer*

KIN 336L Physiology of Exercise Lab **1 credit**

Laboratory experiences in physiology of exercise. Lab required (KIN 336L) for Athletic Training and Health and Wellness majors. Prerequisite: Concurrent registration in KIN 336. *Fall/Spring/Summer*

PROGRAM OF STUDY BIOINFORMATICS

BIOINFORMATICS

Director: Debra T. Burhans, PhD

Introduction

Bioinformatics is an exciting field that involves the application of techniques from computer science, mathematics, statistics and information technology to problems in biology. Bioinformatics is a truly interdisciplinary science that teaches students both practical and conceptual tools for the understanding of biological information. Bioinformatics is important in all areas of biology, from human genetics to ecology, evolutionary biology, epidemiology and structural biology. Bioinformatics is transforming drug discovery, medical diagnostics and other biotechnology related areas. This major is academically rigorous, requiring challenging course work in biology, chemistry, mathematics and computer science. The major is ideal for students interested in learning about and applying mathematical and computational techniques to problem solving in biology.

A degree in bioinformatics from Canisius College provides you with the experience and background required for graduate study or employment in bioinformatics or computer science. Graduates of the program have pursued advanced degrees in bioinformatics, biology, biostatistics, and computer science as well as going on to medical school. They have also found employment in academic and industrial settings. The foundational courses in the major provide a strong general background in computing, biology, and chemistry. Elective courses in the major allow students to specialize in the area of greatest interest to them, whether it is computer science, mathematics, or biology.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/bioinformatics/index.dot>

Learning Goals and Objectives

For Learning Goals and Objectives please go to <http://www.canisius.edu/bioinformatics/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Bioinformatics. In order to proceed in the computer science course sequence students must earn a C or better in CSC 111/L. Similar requirements are found for the introductory biology and chemistry sequences. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students are advised by the Bioinformatics program director. Students interested in the major or minor should contact Dr. Burhans to set up an advising appointment or to discuss any questions. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours. Schedule permitting, bioinformatics majors are encouraged to elect additional coursework in mathematics and physics if they are interested in graduate school.

PROGRAM OF STUDY BIOINFORMATICS

Major Courses

Course	Title	Credits
Bioinformatics:		
BIF 101/L	Introduction to Bioinformatics Lab	1
BIF 400/L	Advanced Algorithms	4
Computer Science:		
CSC 111/L	Introduction to Computer Programming	4
CSC 112/L	Data Structures	4
CSC 213/L	Large Scale Programming	4
CSC 310/L	Information Organization and Processing	4
Mathematics:		
MAT 111	Calculus I	4
MAT 141	Statistics	4
MAT 191	Discrete Mathematics	4
Biology:		
BIO 111/L	Introductory Biology I	4
BIO 112/L	Introductory Biology II	4
BIO 211/L	Biochemistry and Cell Biology I	4
BIO 212/L	Biochemistry and Cell Biology II	4
Chemistry:		
CHM 111/L	General Chemistry I	4
CHM 112/L	General Chemistry II	4
CHM 227/L	Organic Chemistry I	4

Students choose 3 elective courses for the major at the 300-400 level from the list below. Note that as new courses are developed this list may be revised to include additional courses, and that additional courses may be approved on a case by case basis by the program director. Note also that some of these courses may have additional prerequisites not included in the required BIF courses.

Elective Courses

Course	Title	Credits
Biology:		
BIO 404	Genetics and Lab	4
BIO 408	Biotechnology	4
BIO 412	Evolution and Development	3
BIO 419	Cell Biology and Lab	4
BIO 432	Developmental Biology and Lab	4
BIO 450	Molecular Biology and Lab	4
Chemistry:		
CHM 301-302	Classical Physical Chemistry and Lab	8
Computer Science (all courses with lab):		
CSC 313	Advanced Programming Topics	4
CSC 325	Computer Graphics	4
CSC 330	Distributed Computing	4
CSC 351	Comparative Programming Languages	4
CSC 360	Intelligent Systems	4
CSC 380	Web Development	4
CSC 395	Software Engineering	4
Mathematics:		
MAT 341	Numerical Analysis	3
MAT 351-352	Probability and Statistics	3 each
MAT 354	Experimental Design and Statistical Computing	3
Physics:		
PHY 360	Scientific Modeling	3

PROGRAM OF STUDY BIOINFORMATICS

Additional Course Considerations

Students interested in medical or dental school or in advanced study in biology should take the second semester of organic chemistry and a year of physics.

CHM 228/L Organic Chemistry II (4)

PHY 201-202 General Physics with Lab (does not require calculus) (4 each)

or

PHY 223-224 General Physics for Physical Science Majors with Lab (requires Calculus I) (4 each)

Additional recommended math courses for majors include

MAT 112 Calculus II (4)

MAT 211 Calculus III (4)

MAT 219 Linear Algebra (4)

MAT 222 Differential Equations (4)

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
BIF 101/L	1	CSC 112/L	4
CSC 111/L	4	BIO 112/L	4
BIO 111/L	4	CHM 112/L	4
CHM 111/L	4		
Sophomore		Sophomore	
CSC 213/L	4	MAT 111	4
BIO 211/L	4	BIO 212/L	4
CHM 227/L	4	MAT 191	4
Junior		Junior	
MAT 141	4	BIF 400/L	4
BIF elective	3-4	CSC 310/L	4
Senior		Senior	
BIF elective	3-4	BIF elective	3-4

PROGRAM OF STUDY

BIOINFORMATICS

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 many cases additional course work is required. In order to declare a dual major, students must complete a dual major request form and obtain the signature of each department chairperson and the appropriate associate dean. Some bioinformatics majors have elected a second major in Computer Science. If all bioinformatics elective courses are taken in computer science, students will need an additional 4 courses in Computer Science for the double major. Careful consultation with the advisor is important if this is of interest.

Minors

A minor in Bioinformatics is offered. There are 6 required courses (21 credits) that cover Fields 6 and 7 (BIO and CSC courses) and the Advanced Writing intensive attribute (BIF 400) in the Core Curriculum. The courses are listed below. All of the following courses must include the accompanying laboratory section:

Minor Courses

Course	Title	Credits
BIO 111/L	Introductory Biology I	4
BIO 112/L	Introductory Biology II	4
BIF 101L	Introduction to Bioinformatics	1
BIF 400/L	Advanced Algorithms	4
CSC 111/L	Introduction to Programming	4
CSC 112/L	Data Structures	4

All bioinformatics majors will automatically earn a minor in Computer Science. Students should ensure that they file the necessary paperwork with the registrar in order to receive the appropriate notation on their transcripts.

Students with a strong background in mathematics are encouraged to consider a math minor. Please consult as soon as possible with your advisor regarding course selections if you are interested in this possibility. Minimally, students will elect MAT 230 instead of MAT 191 and MAT 351 instead of MAT 141. This major is most suitable for students with AP credit for calculus.

Note: The BIF 400 course is offered once every two years, and students should plan accordingly. The BIF 400 course carries the Advanced Writing-intensive attribute. If all of the other core courses elected by students have no overlap of attributes students will need to elect 11 additional core courses after taking the four foundational courses. With this in mind, it is important to plan schedules carefully to ensure timely completion of the program. Upper-level Computer Science courses are offered once every other year, and students must ensure that they take CSC 310 as soon as it is offered after their sophomore year.

2015 – 2017 BIOINFORMATIC COURSES

BIF 101/L Introduction to Bioinformatics **1 credit**

This 1 credit course provides an introduction to the field of bioinformatics. Web sites, tools, video, discussions, and visiting lectures will help students learn about the major and current opportunities in terms of jobs and research. *Fall*

BIF 400/L Advanced Algorithms **4 credits**

This course covers algorithms and approaches to problem solving where examples are drawn from the field of bioinformatics. Large data sets will be obtained and analyzed using MatLab and/or R and Perl, which will be taught in the course. Students complete a project that is appropriate to their major. Includes applications of information literacy techniques to the major. Prerequisites are one of the following: (1) both CSC 111/L and MAT 191, (2) CSC 112/L, (3) MAT 230, or permission of instructor. (Core: Advanced Writing Intensive) *Spring 2016*

BIF 499 Bioinformatics Internship **1-3 credits**

Students are strongly encouraged to take part in a bioinformatics internship, which typically would take place in a research laboratory or biotechnology firm. Application and faculty advisor approval required. Note that this course cannot count as a bioinformatics elective for the major.

PROGRAM OF STUDY

BIOLOGY

BIOLOGY

Chair: Susan M. Aronica, PhD

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, and (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 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 University at Buffalo (School of Medicine and School of Dental Medicine), 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 website at <http://www.canisius.edu/biology/index.dot>

Learning Goals and Objectives

For Learning Goals and Objectives please go to <http://www.canisius.edu/biology/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 overall average to graduate with a degree in Biology. All students must complete a minimum of 120 credit hours to graduate. Students must attain a C- or greater in each of the introductory courses (BIO 111, 112, and 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. 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. Individual meetings with their academic advisor are required prior to students registering for courses each semester. 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.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY

BIOLOGY

Major Courses

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

Course	Title	Credits
BIO 111/111L	Introductory Biology I with laboratory	4
BIO 112/112L	Introductory Biology II with laboratory	4
BIO 211/211L	Biochemistry and Cell Biology I with laboratory	4
BIO 212/212L	Biochemistry and Cell Biology II with laboratory	4
BIO 351	Biology Seminar I	1
BIO 353	Biology Seminar II	1
CHM 111-112	General Chemistry I and II with laboratories	8
CHM 227-228	Organic Chemistry I and II with laboratories	8
PHY 201-202	General Physics I and II with laboratories	8
	Mathematics electives: two courses (8 credits), three options:	
	(1) MAT 111 Calculus I and MAT 141 or PSY 201 (Statistics)	
	(2) MAT 111-112	
	(3) One year of statistics for sciences	

Note: The combination of MAT 109 and 110 Calculus with Review I and II can be taken in place of MAT 111; likewise, the combination of CHM 109 and 110 can be taken in place of CHM 111

Major Electives

Biology Electives: Six 300-level or 400-level lecture courses, four with associated laboratories. Students must take at least one course with its associated laboratory from any three of the following four Tracks:

Track I: Animal Biology:

BIO 310 Histology and Histophysiology, BIO 313 Embryology, BIO 314 Comparative Anatomy of Vertebrates, BIO 316 Social Organization of Mammals, BIO 324 Human Anatomy, BIO 340 Physiology, BIO 365 Vertebrate Zoology and Ecology, BIO 366 Ornithology

Track II: Biological Diversity:

BIO 305 Microbiology: An Environmental Perspective, BIO 307 Microbiology, BIO 320 Field Ecology, BIO 335 Plant Biology, BIO 343 Entomology, BIO 370 Plant Morphology, BIO 375 Community Ecology, BIO 377 Freshwater Biology

Track III: Cellular Biology:

BIO 414 Proteins and Enzymes, BIO 418 Endocrinology, BIO 419 Cell Biology, BIO 425 Cellular Neurobiology, BIO 426 Immunochemistry, BIO 432 Developmental Biology, BIO 435 Developmental Neurobiology, BIO 445 Cellular Imaging

Track IV: Genetics/Molecular Biology:

BIO 404 Genetics, BIO 405 Medical Genetics, BIO 408 Biotechnology, Theory in Practice, BIO 450 Molecular Biology

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.

PROGRAM OF STUDY

BIOLOGY

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.

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 111/112 and CHM 111/112 in the freshman year, and BIO 211/212 and CHM 227/228 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.

PROGRAM OF STUDY
BIOLOGY

Recommended Semester Schedule for Major Course Requirements:

Freshman		Freshman	
BIO 111/111L	4	BIO 112/112L	4
CHM 111/111L	4	CHM 112/112L	4
MAT (calculus or statistics)		MAT (calculus or statistics)	
Sophomore		Sophomore	
BIO 211/211L	4	BIO 212/212L	4
CHM 227/227L	4	CHM 228/228L	4
		BIO 351 Seminar I	1
Junior		Junior	
PHY 201/201L	4	PHY 202/201L	4
BIO Elective with lab	4	BIO Elective with lab	4
Senior		Senior	
BIO Elective with lab	4	BIO Elective with lab	4
BIO Elective	3-4	BIO Elective	3-4
BIO 353 Seminar II	1		

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean.

PROGRAM OF STUDY

BIOLOGY

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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. 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. Michael Noonan, 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 of the college catalog. A description of the other minors are listed in the following text.

General Biology Minor (for non-biology majors)

See Department Chair Susan Aronica, PhD

Description and requirements

The biology minor may be earned by any student who completes the required courses. Co- and/or Pre-requisites for some of the required courses may effectively limit accessibility.

Students must complete 6 courses for the minor, all of which have labs. Four of these courses are required and two are electives. Required courses are BIO 111, 112, 211, and 212. Students must choose one elective at the 300 level and one elective at the 400 level. All of these courses must be taken with their associated laboratories.

Cell and Molecular Biology Minor

Coordinator: Lisa Morey, PhD

Description and Requirements

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 and the passing of a laboratory skills competency exam given by the instructor. Students must select six courses from the list below. At least four of the six courses must be taken with a laboratory, and no more than four courses and three laboratories may come from one of the two areas: either the Cell or Genetics/Molecular area.

Cell Area

BIO 340 - Physiology
BIO 414 - Proteins and Enzymes
BIO 418 - Endocrinology
BIO 419 - Cell Biology
BIO 425 - Cellular Neurobiology
BIO 426 - Immunochemistry
BIO 430 - Human Nutrition and Metabolism
BIO 432 - Developmental Biology
BIO 435 - Developmental Neurobiology
BIO 440 - Medical Biochemistry
BIO 445 - Cellular Imaging

PROGRAM OF STUDY

BIOLOGY

Genetics / Molecular Area

- BIO 404 - Genetics
- BIO 405 - Medical Genetics
- BIO 408 - Biotechnology
- BIO 424 - Epigenetics and Disease
- BIO 444 - Cancer Biology
- BIO 450 - Molecular Biology

Environmental Biology Minor Coordinator: Katie Costanzo, PhD

Description and Requirements

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. 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 (classes marked with an asterisk fulfill the diversity requirement for this minor).

- BIO 305 - Microbiology: an Environmental Perspective*
- BIO 320 - Field Ecology (required of all students)
- BIO 322 - Conservation Biology
- BIO 335 - Plant Biology*
- BIO 343 - Entomology*
- BIO 360 - Environmental Health
- BIO 365 - Vertebrate Zoology and Ecology*
- BIO 366 - Ornithology*
- BIO 370 - Plant Morphology*
- BIO 375 - Community Ecology
- BIO 377 - Freshwater Biology
- BIO 378 - Wetlands

Neuroscience Minor

Coordinator: Elizabeth Hogan, PhD

Description and Requirements

To complete a neuroscience minor, students need to complete 5 of the courses listed below. One of the courses must be BIO 425 with its laboratory (BIO 425 L) or BIO 435 with its laboratory (BIO 435L).

- BIO 325 - Reproductive Biopsychology
- BIO 345 - Functional Neuroanatomy
- BIO 355 - Behavioral Neuroscience
- BIO 425 - Cellular Neurobiology
- BIO 435 - Developmental Neurobiology
- PSY 397 - Neurobiology of Mental Disorders
- PSY 398 - Neurobiology of Childhood Mental Disorders
- PSY 495 - Research Seminar
- BIO 301 - Experimental Lab Techniques (3 semesters required)

2015 – 2017 BIOLOGY COURSES

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 one one-hour recitation per week. (Field 6)

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. Co-requisites: Concurrent enrollment in BIO 111.

PROGRAM OF STUDY

BIOLOGY

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 one one-hour recitation per week. Prerequisites: C- or better in BIO 111.

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: Concurrent enrollment in BIO 112.

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 one one-hour recitation per week. Prerequisites: C- or better in BIO 111 and 112 and completion of CHM 111/112.

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

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 one one-hour recitation per week. Prerequisites: BIO 211

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. Prerequisites: BIO 211/211L and concurrent registration in BIO 212.

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 and approval of department chair required. Prerequisite: BIO 111 and 112.

BIO 300 Research Methods **0 credits**

BIO 301 Research Methods **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 each section.

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.

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. Prerequisite: BIO 351 Seminar I. (Oral Communication Attribute for Core Curriculum)

PROGRAM OF STUDY

BIOLOGY

Biology Electives For Majors

BIO 305 Microbiology: An Environmental Perspective **3 credits**

Microbiology course with emphasis on microbes and their ecology in humans, soil and water environments. Topics include diversity and characteristics of microorganisms, techniques used to isolate and study microorganisms, interactions among microbial populations in a variety of microbial communities and ecosystems, human host-microbe interactions, and bioremediation. Three hours of lecture and one and a half hours of recitation per week. Prerequisites: BIO 111-112.

BIO 305L Microbiology: An Environmental Perspective Laboratory **1 credit**

Current approaches and techniques which allow the measurement of microorganisms in the environment. Topics include light microscopy, preparation of culture media and aseptic technique, staining of microorganisms, isolation and culture of specialized groups of bacteria from human, soil and aquatic environments. Interactions between microbial populations, biogeochemical cycling, and assessment of water quality will be discussed. Three hours of lab per week. Corequisite: Concurrent enrollment in 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. Prerequisites: BIO 111-112.

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. Corequisite: Concurrent enrollment in 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: BIO 111-112.

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. Prerequisites: BIO 111-112.

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. Prerequisites: BIO 111-112.

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. Prerequisites: BIO 111-112.

BIO 316 Social Organization of Mammals **4 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. Lab required. Three hours of lecture and three hour of lab per week. Prerequisites: BIO 111-112.

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. Prerequisites: BIO 111-112.

PROGRAM OF STUDY

BIOLOGY

- 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. Prerequisites: BIO 111-112.
- 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. Prerequisites: BIO 111-112.
- BIO 324 Human Anatomy** **4 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. Prerequisites: BIO 111-112.
- 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. Prerequisites: BIO 111-112.
- 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: BIO 111-112.
- BIO 335L Plant Biology Laboratory** **1 credit**
Investigative survey of plant structure and function. Corequisite: Concurrent enrollment in 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. Prerequisites: BIO 111-112.
- 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. Corequisite: Concurrent enrollment in 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. Prerequisites: BIO 111-112.
- BIO 345 Functional Neuroanatomy** **3 credits**
Examination of human neuroanatomy, with emphasis on the relationship between neuronal circuits and nervous system function/dysfunction. Prerequisites: BIO 111-112.
- 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. Prerequisites: BIO 111-112.
- 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. Prerequisites: BIO 111-112.

PROGRAM OF STUDY

BIOLOGY

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. Corequisite: Concurrent enrollment in BIO 357.

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. Prerequisites: BIO 111-112.

BIO 365 Vertebrate Zoology and Ecology **4 credits**

The biology of the vertebrates including anatomy, evolution, ecology, natural history and behavior. Labs involve some anatomy, learning local and North American species and groups, and field trips. Lab required. Three hours of lecture and three hours of lab per week. Prerequisites: BIO 111-112.

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. Prerequisites: BIO 111-112.

BIO 370 Plant Morphology **4 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. Prerequisites: BIO 111-112.

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. Prerequisites: BIO 111-112.

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. Corequisite: Concurrent enrollment in BIO 375.

BIO 376 Evolutionary Applications **3 credits**

Provides an advanced understanding on how evolutionary processes lead to patterns observed in natural populations with an emphasis on humans. Topics include evaluation of mechanisms of microevolutionary change and the evolutionary importance of mechanisms such as altruism, life history, aging and pathogen virulence. Prerequisite: BIO 111-112.

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. Prerequisite: BIO 111-112.

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: BIO 111-112.

BIO 400 Independent Study **3 credits**

Independent study under the direction of a faculty member. Arrangements made prior to registration. Prerequisite: Written permission of tutorial faculty member.

PROGRAM OF STUDY

CHEMISTRY AND BIOCHEMISTRY

BIO 401 Independent Research **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.

BIO 404 Genetics **3 credits**

Principles of Mendelian, molecular, population, human and quantitative genetics, with emphasis on inherited diseases. Three hours of lecture and one hour of recitation per week. Prerequisites: BIO 111, 112, 211, 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. Corequisite: Concurrent enrollment in BIO 404.

BIO 405 Medical Genetics **3 credits**

Study of the molecular basis of human disease, with a particular emphasis placed on those mechanisms underlying inherited diseases. Topics include modes of transmission of human characteristics and diseases, both in families and in populations, developmental and cancer genetics, as well as the techniques utilized for screening, diagnosing and treating specific genetic disorders. Prerequisites: BIO 111, 112, 211, 212.

BIO 405L Medical Genetics Laboratory **1 credit**

Experimental methods used in the study of medical genetics. Three hours of lab per week. Corequisite: Concurrent enrollment in BIO 405.

BIO 406 Population 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. Prerequisite: BIO 111, 112, 211, 212.

BIO 406L Population Genetics Laboratory **1 credit**

Principles of population genetics (classical, quantitative, and molecular) as demonstrated by experiments with *Drosophila* and other experimental organisms. Three hours of lab per week. Corequisite: Concurrent enrollment in BIO 406.

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: BIO 111, 112, 211, 212.

BIO 414 Proteins and Enzymes **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. Prerequisite: BIO 111, 112, 211, 212.

BIO 414L Proteins and Enzymes 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. Corequisite: Concurrent registration in 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. Prerequisites: BIO 111, 112, 211, 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. Corequisite: Concurrent enrollment in 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. Prerequisite: BIO 111, 112, 211, 212.

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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. Corequisite: Concurrent enrollment in BIO 419.

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. Prerequisites: BIO 111, 112, 211, 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. Prerequisites: BIO 111, 112, 211, 212.

BIO 425L Cellular Neurobiology Laboratory **1 credit**

Experimental laboratories researching current topics in cell and molecular neurobiology. Three hours of lab per week. Corequisite: Concurrent enrollment in 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. Prerequisite: BIO 111, 112, 211, 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. Corequisite: Concurrent enrollment in BIO 426.

BIO 430 Human Nutrition and Metabolism **3 credits**

Human nutrition, intermediary metabolism and disease are discussed. The biosynthesis and pharmacology of chemicals derived from plants and their importance to human health are considered. Prerequisites: BIO 111, 112, 211, 212.

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. Prerequisites: BIO 111, 112, 211, 212.

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. Corequisite: concurrent enrollment in 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. Prerequisites: BIO 111, 112, 211, 212.

BIO 435L Developmental 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. Corequisite: Concurrent enrollment in 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. Prerequisites: BIO 111, 112, 211, 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. Prerequisite: BIO 111, 112, 211, 212.

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BIO 445 Cellular Imaging **4 credits**

Current approaches to studying cells using microscopy and digital imaging analysis. Students will learn to acquire digital microscopic images using light and fluorescence microscopy, to quantitatively analyze data from digital images, and to process digital images. Lab required. Three hours of lecture and three hours of lab per week. Prerequisites: BIO 111, 112, 211, 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. Prerequisites: BIO 111, 112, 211, 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. Corequisite: Concurrent enrollment in BIO 450.

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. Application process and permission of department chair required.

Non-Major Biology 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. (Field 6)

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. (Field 6)

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. (Field 6)

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. (Field 6)

Core Capstone Courses

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. Core Capstone for all majors. *This course does not count for the biology major.*

Other Courses

(for allied health professionals, clinical laboratory science, pre-pharmacy and select majors within the college of education; may not be used as electives for the Biology major).

BIO 114/114L Human Biology: Introduction to Human Anatomy and Physiology **4 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.

BIO 115/115L Musculoskeletal Anatomy and Physiology **4 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. Students must earn a minimum grade of C in BIO 114 to advance to BIO 115. Prerequisite: BIO 114.

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CHEMISTRY AND BIOCHEMISTRY

CHEMISTRY

Chair: Mariusz M. Kozik, 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. They 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 employment in industry.

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 department's website at <http://www.canisius.edu/chemistry/index.dot> for a more detailed description of the program, faculty, facilities, and academic and co-curricular opportunities.

Learning Goals and Objectives

For Learning Goals and Objectives please go to <http://www.canisius.edu/chemistry/learning-goals-objectives/>

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. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students in this major should have an advisor and should contact the department directly to have an advisor assigned if they do not already have one. All students should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular and/or supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students must complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach the minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

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Major Courses:

Course	Title	Credits
CHM 111/111L	General Chemistry I	4
CHM 112/112L	General Chemistry II	4
CHM 227/227L	Organic Chemistry I	4
CHM 228/228L	Organic Chemistry II	4
CHM 230/230L	Analytical Chemistry	4
CHM 244	Inorganic Chemistry	3
CHM 301/301L	Classical Physical Chemistry (lab not required for the Health Professions track)	4/3
CHM 302/302L	Modern Physical Chemistry (required only for the ACS certified track)	4
BCH 301	Introduction to Biochemistry	3
BCH 302	Cellular Biochemistry (required only by the Health Professions track)	3
CHM 381-480-481	Seminars in Chemistry and Biochemistry	3
CHM 334/334L	Spectrometric Analysis (not required by the Health Professions track)	4
CHM 420	Materials Chemistry (required only for the ACS certified track)	3
CHM 430/430L	Instrumental Analytical Chemistry (not required for the Health Professions track)	4
One year of physics (8 credits)		
ACS certified track:		
PHY 223/223L and PHY 224/224L	General Physics for Science Majors	

Other CHM tracks:		
PHY 201/201L and PHY 202/202L or PHY 223/223L and PHY 224/224L	General Physics	
One year of mathematics (8 credits)		
ACS certified track:		
MAT 111 and MAT 112	Calculus I Calculus II	
Other CHM tracks:		
MAT 111 and MAT 141 or MAT 111 and MAT 112	Inferential Statistics and Computers for Science	
Note: Most pharmacy schools require MAT 111 and MAT 141. Some pharmacy schools require MAT 111, MAT 112, and MAT 141.		
Biology (8 or 4 credits)		
Health professions track:		
BIO 111/111L and BIO 112/112L		
Other CHM tracks:		
BIO 111/111L		
Note: Most pharmacy schools require BIO 111/111L and BIO 112/112L, Microbiology (3), and one year of Anatomy and/or Physiology (6).		

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Major Electives

Two or three major electives are required by each track.

CHM ACS certified track requires:

- one chemistry elective with lab (4 credits)
- one chemistry elective (3 credits)

CHM track requires:

- one chemistry elective with lab (4 credits)
- two chemistry electives (6 credits)

CHM Health Professions track requires:

- one chemistry elective with lab (4 credits)
- one science elective with lab (4 credits)
- one science elective (3 credits)

Science electives may come from CHM and BCH or from other science departments (BIO, PHY, CSC, MAT). BCH 450 or CHM 450 Research in Biochemistry or Chemistry (3 credits) and BCH 451 or CHM 451 Research in Biochemistry or Chemistry (4 credits) can be taken instead of one advanced elective in biochemistry or chemistry.

Major Experiences

Following their sophomore 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.

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).

Additional Course Considerations

MAT 211 Calculus III (4 credits) is highly recommended for students interested in pursuing a PhD degree. In addition, MAT 219 Linear Algebra (4 credits) and MAT 222 Differential Equations (4 credits) are highly recommended for students interested in pursuing a PhD degree in physical, inorganic, or analytical chemistry.

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Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
ALL CHM tracks CHM 111/111L BIO 111/111L MAT 111	4 4 4	CHM ACS certified track and CHM ACS certified track with business minor: CHM 112/112L PHY 223/223L MAT 112 CHM track: CHM 112/112L MAT 112 or MAT 141 CHM track with business minor: CHM 112/112L MAT 141 or ECO 255 CHM Health Professions track: CHM 112/112L BIO 112/112L MAT 112 or MAT 141 CHM Health Professions track with business minor: CHM 112/112L BIO 112/112L MAT 141 or ECO 255	4 4 4 4 4 4 4-3 4 4 4 4 4 4-3
Fall		Spring	
Sophomore		Sophomore	
CHM ACS certified track: CHM 227/227L CHM 244 PHY 224/224L CHM ACS certified track with business minor: CHM 227/227L CHM 244 PHY 224/224L ECO 101 CHM track, CHM Health Professions track, and both these tracks with business minor: CHM 227/227L CHM 244 PHY 201/201L	4 3 4 4 3 4 3 4 3 4 3 4	CHM ACS certified track: CHM 228/228L CHM 230/230L CHM ACS certified track with business minor: CHM 228/228L CHM 230/230L ECO 102 MAT 141 or ECO 255 CHM track and CHM Health Professions track: CHM 228/228L PHY 202/202L CHM and CHM Health Professions tracks with business minor: CHM 228/228L PHY 202/202L ECO 102	4 4 4 4 3 4-3 4 4 4 4 4 4 3

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Fall		Spring	
Junior		Junior	
CHM ACS certified track: CHM 301/301L CHM 381 CHM 420	4 1 3	CHM ACS certified track: CHM 302/302L CHM 430/430L CHM 480 (1 credit)	4 4 1
CHM ACS certified track with business minor: CHM 301/301L CHM 381 CHM 420 MKT 201	4 1 3 3	CHM ACS certified track with business minor: CHM 302/302L CHM 430/430L CHM 480 (1 credit) MGT 101	4 4 1 3
CHM track: CHM 334/334L BCH 301 CHM 381 (1 credit)	4 3 1	CHM track: CHM 230/230L CHM Elective CHM 480 (1 credit)	4 3 1
CHM track with business minor: CHM 334/334L BCH 301 CHM 381 (1 credit) ECO 101	4 3 1 3	CHM track with business minor: CHM 230/230L CHM Elective CHM 480 MGT 101	4 3 1 3
CHM Health Professions track: CHM 301 BCH 301 CHM 381	3 3 1	CHM Health Professions track: CHM 230/230L BCH 302 CHM 480	4 3 1
CHM Health Professions track with business minor: CHM 301 BCH 301 CHM 381 ECO 101	3 3 1 3	CHM Health Professions track with business minor: CHM 230/230L BCH 302 CHM 480 MGT 101	4 3 1 3

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Fall		Spring	
Senior		Senior	
CHM ACS certified track:		CHM ACS certified track:	
CHM 334/334L	4	CHM Elective + Lab	4
BCH 301	3	CHM Elective	3
CHM 481	1	CHM ACS certified track with business minor:	
CHM ACS certified track with business minor:		CHM Elective + Lab	4
CHM 334/334L	4	CHM Elective	3
BCH 301	3	FIN 201	3
CHM 481	1	CHM track:	
ACC 201	3	CHM 430/430L	4
CHM track:		CHM Elective + Lab	4
CHM 301/301L	4	CHM track with business minor:	
CHM Elective	3	CHM 430/430L	4
CHM 481	1	CHM Elective + Lab	4
CHM track with business minor:		FIN 201	3
CHM 301/301L	4	CHM Health Professions track:	
CHM Elective	3	CHM Elective + Lab	4
CHM 481	1	CHM Health Professions track with business minor:	
ACC 201	3	CHM Elective + Lab	4
MKT 201	3	SCI Elective	3
CHM Health Professions track:		FIN 201	3
SCI Elective	3		
SCI Elective + Lab	4		
CHM 481	1		
CHM Health Professions track with business minor:			
SCI Elective + Lab (4 credit)	4		
CHM 481 (1 credit)	1		
ACC 201 (3 credits)	3		
MKT 201	3		

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Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 course work may be necessary. 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

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. Some majors and minors can be completed within the minimum 120-credit hour degree requirement, but in some cases additional course work may be necessary. Students must complete the appropriate minor request form.

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:

Two semesters of General Chemistry with laboratory:
CHM 111/111L and CHM 112/112L (8 credits)

Two semesters of Organic Chemistry with laboratory:
CHM 227/227L and CHM 228/228L (8 credits)

One semester of Analytical Chemistry with laboratory:
CHM 230/230L or CHM 334/334L or CHM 430/430L (4 credits)

One semester of Physical Chemistry or Inorganic Chemistry:
CHM 301 or CHM 244 (3 credits)

Chemistry Elective:
one CHM 300 or 400 level course (3 credits)

2015 – 2017 CHEMISTRY 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. (Field 6) *Fall*

CHM 109 (fall) followed by CHM 110 (spring): General Chemistry with Review I **7 credits**

General Chemistry I with review for science majors.

CHM 109, three lectures and one recitation per week. CHM 109 reviews some mathematical concepts, emphasizes dimensional analysis, nomenclature, stoichiometry, solutions, basic chemical reactions, and thermochemistry. *Fall*

CHM 110, three lectures, one recitation, as well as a 3-hour laboratory co-requisite. CHM 110 emphasizes atomic and molecular structure, periodic properties, gas laws, and states of matter. *Spring*

The CHM 109/110 sequence is equivalent to CHM 111 and a Free Elective. Students completing the CHM 109/110 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 109 is a prerequisite for CHM 110 and a minimum grade of C- in CHM 110 is a prerequisite for both CHM 112 (General Chemistry II) and CHM 227 (Organic Chemistry I).

CHM 111: General Chemistry I **4 credits**

General Chemistry I for science majors, three lectures and one recitation per week, as well as a 3-hour laboratory co-requisite. This course is recommended for students with a very good background in mathematics and significant exposure to high school chemistry. The course emphasizes dimensional analysis, nomenclature, stoichiometry, solutions, basic chemical reactions, thermochemistry, atomic and molecular structure, periodic properties, gas laws, and states of matter. Prerequisite: a minimum score of 580 in MSAT or instructor's approval. Co-requisite: CHM 111 laboratory. Minimum C- in CHM 111 is a prerequisite for both CHM 112 (General Chemistry II) and CHM 227 (Organic Chemistry I). (Field 6) *Fall*

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CHM 112: General Chemistry II **4 credits**

General Chemistry II for science majors, three lectures and one recitation per week, as well as a 3-hour laboratory co-requisite. The course emphasizes properties of solutions (including colligative properties), kinetics, chemical equilibrium concept, calculations involving acid/base and precipitation equilibria, thermodynamics (second and third law), electrochemistry, nuclear chemistry, chemistry of the environment, metals, and nonmetals, and basic coordination chemistry. Prerequisite: Minimum C- in CHM 111 or in CHM 110. Co-requisite: CHM 112 laboratory. Minimum C in CHM 112 is required for all chemistry and biochemistry majors. (Field 6) *Fall/Spring*

CHM 227-228 Organic Chemistry **8 credits**

Fundamental treatment of organic chemistry. Mechanisms, structure and synthetic methods. Laboratory covers techniques of separation, purification, analysis and organic synthesis. Three lectures, one laboratory, and one recitation per week. Prerequisites for CHM 227: a minimum of C- in CHM 110 or 111; a minimum C- in CHM 227 is a prerequisite for CHM 228. *Fall/Spring*

CHM 230 Analytical Chemistry **4 credits**

Principles and methodology of modern analytical chemistry presented with particular emphasis on chromatographic, spectrophotometric and electroanalytical techniques. Three lectures, one laboratory and one recitation per week. Prerequisites: CHM 112 with the minimum grade of C. *Spring*

CHM 232 Analytical Environmental Chemistry **4 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, one laboratory and one recitation per week. Prerequisites: CHM 111-112. *Spring 2017*

CHM 244 Inorganic Chemistry **3 credits**

Electronic configuration of atoms, periodic classification of the elements, nature of chemical bonding, symmetry and group theory, structures and thermodynamics of solids, acid/base concepts, isomerism, bonding, reactions and spectroscopy of coordination compounds, and other aspects of modern inorganic chemistry. Prerequisites: CHM 112 with the minimum grade of C. *Fall*

CHM 301 Classical Physical Chemistry **3 credits**

Principles of thermodynamics with applications to phase and chemical equilibria. Kinetic theory of gases and chemical kinetics. Three lectures and one recitation per week. Prerequisites: CHM 112 with the minimum grade of C, MAT 111, PHY 201-202 or 223-224, or equivalent courses. *Fall*

CHM 301L Classical Physical Chemistry Laboratory **1 credit**

Selected experiments demonstrating principles of thermodynamics and chemical kinetics. One four-hour lab per week. Advanced Writing-intensive attribute. Prerequisites: CHM 230 Laboratory and CHM 301 or concurrent registration in CHM 301. *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. Prerequisites: CHM 112 with the minimum grade of C, CHM 244, MAT 111-112, PHY 201-202 or 223-224, or equivalent courses. *Spring*

CHM 302L Modern Physical Chemistry Laboratory **1 credit**

Selected spectroscopic experiments with applications to molecular structure. One four-hour lab per week. Prerequisites: CHM 334 Laboratory or CHM 430 Laboratory with the minimum grade of C- and CHM 302 or concurrent registration in CHM 302. *Spring*

CHM 334 Spectrometric Analysis **4 credits**

Spectrometric methods for the elucidation of chemical structures. Includes nuclear magnetic resonance, infrared, ultraviolet and mass spectrometry. Emphasis on organic compounds. Three lectures and one laboratory per week. Prerequisites: CHM 227-228. *Fall*

CHM 338 Intermediate Organic Chemistry **3 credits**

Important basic concepts in organic chemistry are reviewed at a higher level than is possible in an introductory course. New concepts are presented in the area of reaction mechanisms, physical organic chemistry, and in the use of retrosynthetic analysis to plan multi-step organic syntheses. Prerequisites: CHM 227-228. *Fall 2015*

PROGRAM OF STUDY

CHEMISTRY AND BIOCHEMISTRY

CHM 381-480-481 Chemistry and Biochemistry Seminar **1 credit each**

CHM 381 Scientific Literature and Communication

CHM 480 Communicating Concepts in Chemistry

CHM 481 Communicating Research Literature
(Oral Communication attribute)

Student-faculty seminar for majors. To be taken for three semesters. Prerequisites: CHM 228, CHM 244, and Junior standing. *Fall/Spring*

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. Prerequisites: CHM 228 and CHM 244. *Spring 2016*

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 in CHM 401. *Spring 2016*

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. Prerequisites: CHM 228 and CHM 244. *Fall 2016*

CHM 430 Instrumental Analytical Chemistry **4 credits**

Advanced instrumental methods of analysis including spectroscopy, chromatography and various electrochemical techniques. Three lectures and one laboratory per week. Prerequisite: CHM 112. *Spring*

CHM 450 Research in Chemistry **3 credits**

Independent research under the direction of a member of the chemistry faculty. Students are required to spend 9 hours per week conducting research. Research and consultation times will be arranged after approval of department chair. *Fall/Spring*

CHM 451 Research in Chemistry **4 credits**

Independent research under the direction of a member of the chemistry faculty. Students are required to spend 12 hours per week conducting research. Research and consultation times will be arranged after approval of department chair. *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. Prerequisites: CHM 227-228 and BCH 301. *Spring 2017*

CHM 490 Internships in Chemistry & Biochemistry **3 credits**

Internships in chemical or biochemical industry under the direction of company and faculty supervisors. Prerequisite: Permission of the department chair. *Fall/Spring*

CHM 498-499 Independent Study **3 credits**

Independent study under the direction of the chemistry staff. Prerequisite: Permission of the department chair. *Fall/Spring*

PROGRAM OF STUDY CHEMISTRY AND BIOCHEMISTRY

BIOCHEMISTRY

Chair: Mariusz M. Kozik, 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 department's website at <http://www.canisius.edu/chemistry/index.dot> for a more detailed description of the program, faculty, facilities, and academic and co-curricular opportunities.

Learning Goals and Objectives

For Learning Goals and Objectives please go to <http://www.canisius.edu/chemistry/learning-goals-objectives/>

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. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students in this major should have an advisor and should contact the department directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students must complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach the minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY

CHEMISTRY AND BIOCHEMISTRY

Major Courses

Course	Title	Credits
CHM 111/111L	General Chemistry I	4
CHM 112/112L	General Chemistry II	4
CHM 227/227L	Organic Chemistry I	4
CHM 228/228L	Organic Chemistry II	4
CHM 230/230L	Analytical Chemistry (required only for the ACS certified track)	4
CHM 244	Inorganic Chemistry	3
CHM 301	Classical Physical Chemistry (ACS track requires CHM301/301L)	3/4
CHM 302/302L	Modern Physical Chemistry (required only for the ACS certified track)	4
CHM 420	Materials Chemistry (required only for the ACS certified track)	3
BCH 301/301L	Introduction to Biochemistry	4
BCH 302	Cellular Biochemistry	3
BCH 403/403L	Molecular Biology	4
CHM 381-480-481	Seminars in Chemistry and Biochemistry Communication	3
Spectroscopy or Instrumentation Course with lab:		
CHM 334/334L or CHM 430/430L	Spectrometric Analysis Instrumental Analytical Chemistry	4 4
One year of physics (8 credits):		
BCH ACS certified track:		
PHY 223/223L and PHY 224/224L	General Physics for Science Majors I General Physics for Science Majors II	

Other BCH tracks:		
PHY 201/201L and PHY 202/202L or PHY 223/223L and PHY 224/224L	General Physics I General Physics II General Physics for Science I General Physics for Science II	
One year of mathematics (8 credits):		
BCH ACS certified track:		
MAT 111 and MAT 112	Calculus I Calculus II	
BCH track:		
MAT 111 and MAT 141 or MAT 111 and MAT 112	Calculus I Inferential Statistics and Computers for Science Calculus I Calculus II	
Note: Most pharmacy schools require MAT 111 and MAT 141. Some pharmacy schools require MAT 111, MAT 112, and MAT 141		
One year of biology (8 credits):		
BIO 111/111L and BIO 112/112L	Introductory Biology I and Lab Introductory Biology II and Lab	
Note: Most pharmacy schools require BIO 111/111L and BIO 112/112L, Microbiology (3), and one year of Anatomy and/or Physiology (6).		

PROGRAM OF STUDY

CHEMISTRY AND BIOCHEMISTRY

Major Electives

Two major electives are required for Biochemistry track.

Biochemistry elective (3 credits)

(any 300 or 400 level BCH course and some CHM courses except BCH 301, BCH 302 and BCH 403)

Biochemistry or Chemistry elective (3 credits)

No major electives are required for ACS certified track.

BCH 450 or CHM 450 Research in Biochemistry or Chemistry (3 credits) and BCH 451 or CHM 451 Research in Biochemistry or Chemistry (4 credits) can be taken instead of one advanced elective in biochemistry or chemistry.

Major Experiences

Following their sophomore 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).

Additional Course Considerations

MAT 211 Calculus III (4 credits) is highly recommended for students interested in pursuing a PhD degree.

PROGRAM OF STUDY
CHEMISTRY AND BIOCHEMISTRY

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
BCH ACS certified track, BCH track, and both tracks with business minor: CHM 111/111L (4 credits) BIO 111/111L (4 credits) MAT 111 (4 credits)	4 4 4	BCH ACS certified track and BCH ACS certified track with business minor: CHM 112/112L (4 credits) BIO 112/112L (4 credits) MAT 112 (4 credits) BCH track: CHM 112/112L (4 credits) BIO 112/112L (4 credits) MAT 141 or MAT 112 (4 credits) BCH track with business minor: CHM 112/112L (4 credits) BIO 112/112L (4 credits) MAT 141 or ECO 255 (4/3 credits)	4 4 4 4 4 4 4 4 4-3
Fall		Spring	
Sophomore		Sophomore	
BCH ACS certified track: CHM 227/227L (4 credits) CHM 244 (3 credits) BCH ACS certified track with business minor: CHM 227/227L (4 credits) CHM 244 (3 credits) ECO 101 (3 credits) BCH track and BCH track with business minor: CHM 227/227L (4 credits) CHM 244 (3 credits) PHY 201/201L (4 credits)	4 3 4 3 3 4 3 4	BCH ACS certified track: CHM 228/228L (4 credits) PHY 223/223L (4 credits) BCH ACS certified track with business minor: CHM 228/228L (4 credits) PHY 223/223L (4 credits) ECO 102 (3 credits) MAT 141 or ECO 255 (4/3 credits) BCH track: CHM 228/228L (4 credits) PHY 202/202L (4 credits) BCH track with business minor: CHM 228/228L (4 credits) PHY 202/202L (4 credits) ECO 102 (3 credits)	4 4 4 4 3 4-3 4 4 4 4 3

PROGRAM OF STUDY
CHEMISTRY AND BIOCHEMISTRY

Fall		Spring	
Junior		Junior	
BCH ACS certified track and BCH ACS certified track with business minor: BCH 301/301L PHY 224/224L CHM 381 CHM 420 BCH track: BCH 301/301L CHM 334/334L (Either 334/334L or 430/430L is required) CHM 381 BCH track with business minor: BCH 301/301L CHM 334/334L (Either 334/334L or 430/430L is required) CHM 381 ECO 101		BCH ACS certified track: BCH 302 4 CHM 230/230L 4 CHM 480 1 BCH ACS certified track with business minor: 3 BCH 302 CHM 230/230L 4 CHM 480 4 MGT 101 BCH track: 1 BCH 302 BCH Elective 4 CHM 480 4 BCH track with business minor: BCH 302 1 BCH Elective 3 CHM 480 MGT 101	3 4 1 3 4 1 3 3 3 1 3 3 1 3
Fall		Spring	
Senior		Senior	
BCH ACS certified track: CHM 301/301L CHM 334/334L (Either 334/334L or 430/430L is required) CHM 481 BCH ACS certified track with business minor: CHM 301/301L CHM 334/334L (Either 334/334L or 430/430L is required) CHM 481 ACC 201 MKT 201 BCH track: CHM 301 CHM or BCH Elective CHM 481 BCH track with business minor: CHM 301 CHM 481 ACC 201 MKT 201		BCH ACS certified track: 4 CHM 430/430L 4 (Either CHM 334/334L or CHM 430/430L is required) CHM 302/302L 1 BCH 403/403L BCH ACS certified track with business minor: 4 CHM 430/430L 4 (Either CHM 334/334L or CHM 430/430L is required) CHM 302/302L 1 BCH 403/403L 3 FIN 201 3 BCH track: CHM 430/430L 3 (Either CHM 334/334L or CHM 430/430L is required) 3 BCH 403/403L 1 BCH track with business minor: CHM 430/430L 3 (Either CHM 334/334L or CHM 430/430L is required) 1 BCH 403/403L 3 CHM Elective 3 FIN 201	4 4 4 4 4 4 3 4 4 4 4 4 4 4 3 4 4 3 3

PROGRAM OF STUDY

CHEMISTRY AND BIOCHEMISTRY

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

2015 – 2017 BIOCHEMISTRY 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. Prerequisites: CHM 228 with the minimum grade of C-. *Fall*

BCH 301L Introduction to Biochemistry Lab **1 credit**

One four-hour lab per week. Prerequisite: BCH 301 or concurrent registration in BCH 301. *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. Prerequisites: BCH 301 with the minimum grade of C-. *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. Prerequisites: BCH 301 with a minimum grade of C-. *Spring*

BCH 403L Molecular Biology Lab **1 credit**

One four-hour lab per week. Advanced Writing-intensive attribute. Prerequisites: BCH 301L and BCH 403 (or concurrent registration in BCH 403). *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. Research and consultation times to be arranged after approval of department chair. *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. Research and consultation times to be arranged after approval of department chair. *Fall/Spring*

PROGRAM OF STUDY
CLASSICS

CLASSICS

Chair: Thomas M. Banchich, 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 department's website at <http://www.canisius.edu/classics/index.dot> for a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities.

Learning Goals and Objectives

For Learning Goals and Objectives please go to <http://www.canisius.edu/classics/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Classics. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students should have a Classics Department advisor and should contact the department directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students must complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Classics Major

All Classics Majors:	Credits
CLS 103 Greek History or CLS 104 Roman History	3
CLS 205 Mirror of the Past: Greece or CLS 206 Mirror of the Past: Rome	3

Greek Language and Hellenic Studies Track/CLSG

Title	Credits
6 Classical Greek/CLG courses (at least 6 credits at the 300 level or above)	18
4 Classics/CLG/CLL/CLS electives (no more than two of which may be Interdepartmental)	12
Latin Language and Roman Studies Track/CLSL	
6 Latin/CLL courses (at least 6 credits at the 300 level or above)	18
4 Classics/CLG/CLL/CLS electives (no more than two of which may be Interdepartmental)	12

Classical Studies Track/CLSS

Title	Credits
4 Classical Greek/CLG OR 4 Latin/CLL courses (at least 6 credits at the 200 level or above)	12
6 Classics/CLG/CLL/CLS electives (no more than two of which may be Interdepartmental)	18
Total Credits	36

PROGRAM OF STUDY
CLASSICS

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

Course	Title	Credits
CLG 101	Elementary Greek	3
CLG 102	Elementary Greek	3
CLG 201-218		3
CLG 301-318	<i>Paideia</i>	3
CLG 400		3
CLL 101	Elementary Latin	3
CLL 102	Elementary Latin	3
CLL 201-218		3
CLL 301-318	<i>Humanitas</i>	3
CLL 400		3
(6 CLL credits strongly recommended for students on CLS-Greek track)		
(6 CLG credits strongly recommended for students on CLS-Latin track)		
CLS 103	Greek History	3
CLS 104	Roman History	3
CLS 205	Mirror of the Past: Greece	3
CLS 206	Mirror of the Past: Rome	3
CLS 207	Mythology and Literature	3
CLS 214	Greek and Roman Tragedy	3
CLS 300	Roman Law and Society	3
CLS 301	The Age of Cicero	3
CLS 308	Pagans and Christians	3
CLS 309	Greek and Roman Religion	3
CLS 311	Alexander the Great	3
CLS 312	The Greek Enlightenment	3

Interdepartmental Electives

Course	Title	Credits
ANT 230	Introduction to Archaeology	3
FAH 101	Introduction to Art History	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	Medieval Material Culture	3
HON 110	Western Tradition I	3
PHI 301	Ancient Philosophy	3
PHI 302	Medieval Philosophy	3
RST 201	Introduction to the New Testament	3
RST 325	Early Christianity	3

Major Experiences

Classics majors and minors are encouraged to become members of the Canisius Classics Club and to attend the weekly departmental Classics Tea@2. The department also offers the opportunity for Classics majors and minors to become members of Eta Sigma Phi, the national Classics Honor Society.

Additional Course Considerations

Classics majors who are interested in pursuing graduate work in Classics are encouraged to enroll in German and French language courses.

PROGRAM OF STUDY
CLASSICS

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
CLS 103 or CLS 205 CLSG: CLG 101 or CLSL: CLL 101	3 3 3	CLS 104 or CLS 206 CLSG: CLG 102 or CLSL: CLL 102	3 3 3
Sophomore		Sophomore	
CLS 207 or other major elective CLSG: CLG 200 level or CLSL: CLL 200-level	3 3 3	CLS 207 or other major elective CLSG: CLG 200-level or CLSL: CLL 200-level	3 3 3
Junior		Junior	
CLSG: CLG 200 or 300-level CLL 101 or CLSL: CLL 200 or 300-level CLG 101 Major elective	3 3 3 3 3	CLSG: CLG 300-level CLL 102 or CLSL: CLL 300-level CLG 102 Major elective	3 3 3 3 3
Senior		Senior	
CLSG: CLG 300-level or CLSL: CLL 300-level Major elective	3 3	CLSG: CLG 400 or CLSL: CLL 400 Major elective	3 3

PROGRAM OF STUDY CLASSICS

Dual Majors

A major in Classics is a perfect complement to other majors in a broad range of disciplines – particularly Anthropology, Art History, Creative Writing, English, European Studies, History, Modern Languages, Political Science, Philosophy, and Religious Studies – and a worthwhile second major for students interested in careers in law or medicine. Before a student declares a dual major it is important to meet with the appropriate academic departments for advisement. 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

A minor in Classics is especially appropriate for students of Archaeology, Anthropology, Art History, Creative Writing, English, History, Political Science, Philosophy, and Religious Studies. Students must complete the appropriate minor request form.

Classics Minors

Students who wish to minor in Classics must meet the following requirements:

Classical language: two semesters of Latin or Greek (CLL OR CLG) 6 credits
CLS 103 or CLS 104 3 credits
CLS 205 or CLS 206 3 credits
Classics electives: two upper-level (select from any CLG, CLL or CLS courses at the 200-level or above; FAH 210 and 213) 6 credits
Total (6 courses) 18 credits

2015 – 2017 CLASSICS COURSES

- 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. (Global Awareness Attribute, Field 4) *Fall*
- CLS 104 Roman History** 3 credits
Social, political, and intellectual history of Rome from the foundation of the city to late antiquity. (Global Awareness Attribute, Field 4) *Spring*
- CLS 205 Mirror of the Past: Greece** 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. (Global Awareness Attribute, Field 3) *Fall*
- CLS 206 Mirror of the Past: Rome** 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. (Global Awareness Attribute, Field 3) *Spring*
- 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. (Ethics Attribute, Field 3) *Fall/Spring*
- FAH 210 Ancient Egyptian and Near Eastern Art** 3 credits
- FAH 213 Greek and Roman Art** 3 credits
- 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. (Ethics and Oral Communication Attributes, Field 3)

PROGRAM OF STUDY CLASSICS

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. (Justice and Oral Communication Attributes, Field 5)

CLS 301 The Age of Cicero **3 credits**

An introduction to Roman literature and society in the first century B.C. with a focus on the development of the genres of Latin literature and the relationship between politics and literature. (Writing Intensive Attribute, Field 3)

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. (Global Awareness Attribute, Field 1)

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. (Oral Communication Attribute, Field 1)

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. (Global Awareness Attribute)

CLS 312 The Greek Enlightenment **3 credits**

Greek thought from Homer to Plato. Lyric poets, Hippocratic texts, Presocratics and Sophists, Athenian tragedy, Thucydides, Aristophanes, and Plato. Impact of literacy on Greek thought. Greek philosophy in its social and historical context. (Field 2)

Greek Language Courses (CLG)

CLG 101 Elementary Greek **3 credits**

Intensive introduction to the grammar, syntax, and vocabulary of classical Greek. Selected readings. *Fall*

CLG 102 Elementary Greek **3 credits**

Intensive introduction to the grammar, syntax, and vocabulary of classical Greek. Selected readings. Prerequisite: CLG 101 or instructor's permission. *Spring*

CLG 201-206 Greek Literature **3 credits each**

Selected Greek literary authors, genres, or themes. (Field 3) *Fall/Spring*

CLG 207-212 Greek Historians **3 credits each**

Selected Greek historical authors, genres, or themes. (Field 4) *Fall/Spring*

CLG 213-218 Greek Philosophers **3 credits each**

Selected Greek philosophical authors, genres, or themes. (Field 2) *Fall/Spring*

CLG 301-306 Readings in Greek Literature **3 credits each**

Selected Greek literary authors, genres, or themes. (Field 3) *Fall/Spring*

CLG 307-312 Readings in Greek History **3 credits each**

Selected Greek historical authors, genres, or themes. (Field 4) *Fall/Spring*

CLG 313-318 Readings in Greek Philosophy **3 credits each**

Selected Greek philosophical authors, genres, or themes. (Field 2) *Fall/Spring*

GLG 400 Paideia **3 credits**

Selected Greek authors, texts, themes, or genres. (Core Capstone) Prerequisites: at least two semesters of ancient Greek, completion of core requirements, and chair's permission. *Fall/Spring*

PROGRAM OF STUDY
CLASSICS

Latin Language Courses (CLL)

CLL 101 Elementary Latin 3 credits

Intensive introduction to the grammar, syntax, and vocabulary of classical Latin. Selected readings. *Fall*

CLL 102 Elementary Latin 3 credits

Intensive introduction to the grammar, syntax, and vocabulary of classical Latin. Selected readings.
Prerequisite: CLL 101 or instructor's permission. *Spring*

CLL 201-206 Latin Literature 3 credits each

Selected Latin literary authors, genres, or themes. (Field 3)
Fall/Spring

CLL 207-212 Roman Historians 3 credits each

Selected Roman historical authors, genres, or themes. (Field 4)
Fall/Spring

CLL 213-218 Roman Philosophers 3 credits each

Selected Roman philosophical authors, genres, or themes.
(Field 2) *Fall/Spring*

CLL 301-306 Readings in Latin Literature 3 credits each

Selected Latin literary authors, genres, or themes. (Field 3)
Fall/Spring

CLL 307-312 Readings in Roman History 3 credits each

Selected Roman historical authors, genres, or themes. (Field 4)
Fall/Spring

CLL 313-318 Readings in Roman Philosophy 3 credits each

Selected Roman philosophical authors, genres, or themes.
(Field 2) *Fall/Spring*

CLL 400 Humanitas 3 credits

Selected Latin authors, texts, themes, or genres. (Core Capstone) Prerequisites: at least two semesters of Latin, completion of core requirements, and chair's permission.
Fall/Spring

PROGRAM OF STUDY COMMUNICATION STUDIES

COMMUNICATION STUDIES

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 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 Interpersonal/Organizational Communication. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to our website at <http://www.canisius.edu/communication/index.dot>

Learning Goals and Objectives

For Learning Goals and Objectives please go to <http://www.canisius.edu/communication/learning-goals-objectives/>

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 sequence within the Communication major and need at least 36 hrs. of communication courses (33 hrs. for dual majors).

Advisement

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. Each student should have an academic advisor. Students should meet with their advisors regularly. Canisius College requires all students to meet with their advisor and obtain their alternate PIN in order to register each semester.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at www.canisius.edu/academics/core/

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY COMMUNICATION STUDIES

Major Courses

Major Course Requirements (12 Courses)		36 Credits
Course	Title	Credits
A. Major Required Courses (6 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	3
B. Sequence Courses (2 courses)		6

Major Electives

To be selected from available COM courses, or courses with the DMA, JRN, or FAS prefix that are designated as COM electives. Photography courses listed in Fine Arts are limited to six credits in the Communication Studies major.

Major Electives (4 courses)		12 Credits
Course	Title	Credits
COM 302	Small Group Communication	3
COM 304	Family Communication	3
COM 311	Principles of Advertising	3
COM 312	Public Relations: Principles and Practices	3
COM 315	Advertising and the Creative Process	3
COM 318	Organizational Communication	3
COM 319	Training and Development	3
COM 320	Advertising Writing	3
COM 325	Media Literacy	3
COM 327	Gender Differences in Human Communication	3
COM 328	Scriptwriting	3
COM 330	Public Relations Writing	3
COM 335	Communication and Personality	3
COM 337	Constructive Uses of Humor	3
COM 350	Health Communication	3

COM 351	Media Ethics	3
COM 353	Advertising Account Strategies	3
COM 354	Persuasion	3
COM 355	Advertising Media Planning/	3
COM 359	Buying	3
COM 360	Communication and Sports	3
COM 361	Health Campaigns Introduction to Television Production	3
COM 367	Broadcasting in America	3
COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genres	3
COM 385	Television & Children	3
COM 411	Advertising Campaigns	3
COM 412	Public Relations Case Studies	3
COM 413	Issues in Public Relations	3
COM 414	Issues in Advertising	3
COM 418	Interviewing	3
COM 422	Public Relations Campaigns	3
COM 479	World Cinema	3
COM 488	Internship I Seminar	3-12
COM 491	Video Institute I	3
COM 492	Video Institute II	3
COM 493	Video Institute III	3
COM 494	Video Institute IV	3
COM 498	Internship II Seminar	3-9
COM 499	Independent Study	3
DMA 201	Introduction to Digital Media	3
DMA 215	Digital Media Culture	3
DMA 216	Digital Media Law/Ethics	3
DMA 212	2D Graphics	3
DMA 217	Interaction Design	3
DMA 310	Digital Audio/Music Production	3
DMA 342	Introduction to Web Design	3
DMA 385	Digital Filmmaking	3

PROGRAM OF STUDY

COMMUNICATION STUDIES

DMA 442	Advanced Web Design	3
FAS 140*	Introduction to Still Photography	3
FAS 141*	Digital Photography	3
FAS 142*	Travel Photography	3
FAS 240*	Color Photography	3
FAS 241*	Intermediate Photography	3
JRN 310	Journalism I	3
JRN 311	Journalism II	3
JRN 322	Feature/Magazine Writing	3
JRN 336	Sports Journalism	3
JRN 369	Television Features	3

*Only 6 credits of FAS photography courses can be applied as COM elective credit.

Major Experiences

Internships and Independent Study

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. Independent Study (COM 499) provides the opportunity for a student to work under the supervision of a faculty member to complete an academic research project culminating in a scholarly product or a production of some kind. Opportunity for independent study (three credits) is open only to junior and senior majors in good standing with consent of the instructor, chair, and associate dean. Please note that Independent Studies are granted only in very specific circumstances. See the department chair for more information.

PROGRAM OF STUDY
COMMUNICATION STUDIES

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
COM 205	3	COM 204	3
Sophomore		Sophomore	
COM 201	3	COM 202	3
COM 206	3	COM 203	3
or		or	
COM Elective	3	COM Elective	3
Junior		Junior	
COM 206	3	COM 203	3
or		or	
COM Elective	3	COM Elective	3
Senior		Senior	
COM Elective	3	COM Elective	3
COM Elective	3	COM Elective	3

PROGRAM OF STUDY

COMMUNICATION STUDIES

Communication Studies Minor:

Beginning in the spring of 2015, the Communication Studies department began to offer a general Communication Studies minor. Students need to complete 18 credit hours of Communication Studies courses, based on the following requirements:

Required courses for the Communication Studies minor (18 total credits):

1. Foundation courses: Any three of the following: (9 credits)

Course Credits

Course	Title	Credits
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	3

Note: A section of each foundation course is offered every semester. Multiple sections of COM 201 and 203 are offered each semester.

2. Sequence Courses: One course from each of the following areas: (9 credits)

One course from Interpersonal/Organizational Communication (COM 302, 304, 318, 319, 327, 335, 337, 350, 354, 359) 3 credits each

One course from Advertising/Public Relations Communication (COM 311, 312, 315, 320, 330, 340, 348, 353, 360) 3 credits each

One course from Media Communication (COM 323, 325, 328, 351, 361, 367, 368, 374, 375, 376, 382, 385, 479) 3 credits each

Dual Majors

Dual 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, English, 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 dual majors and successfully complete 3 or more credit hours in Internships or Independent Study (COM 488, COM 498 or COM 499) 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).

Minors

Students who wish to expand their educational opportunities may decide to declare a minor (outside the Communication Studies department) in addition to their Communication Studies major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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. The Communication Studies department participates in programs with Women's Studies and Fine Arts, and also offers courses towards a minor in Child, Family and Community Studies.

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.

PROGRAM OF STUDY COMMUNICATION STUDIES

2015 – 2017 COMMUNICATION STUDIES COURSES

Note: Additional Communication Studies courses may be offered each semester in both the day and evening. Students should consult the department.

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. (Oral Communication attribute)

COM 202 Communication Theory **3 credits**
Fundamental forms of communication theory and perspectives are explored and related to particular lines of research in interpersonal, group, organizational, public and mass mediated communication contexts.

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. (Advanced Writing Intensive attribute)

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. (Field 5 – Social Sciences course)

COM 205 Mass Communication and Society **3 credits**
Survey of mass communication processes and the mass media in terms of development, structures, functions, effects and interactive relationships with American society. (Field 5 – Social Sciences course)

COM 206 Introduction to Research Methods **3 credits**
The fundamentals of the scientific method, especially the basics of research methods, designs and hypothesis testing.

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.

COM 304 Family Communication **3 credits**
Examines contemporary family communication theories, concepts, models and research. Special emphasis on improving family communication across the lifespan. (Field 5 – Social Sciences course)

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)

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.

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)

COM 318 Organizational Communication **3 credits**
Communication principles and practices, including communicator style variables, communication flow and competent superior-subordinate communication.

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. Prerequisite: COM 201.

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.

PROGRAM OF STUDY COMMUNICATION STUDIES

COM 325 Media Literacy **3 credits**

Focuses on theoretical approaches and practical skills enabling students to analyze, think critically and produce effective mediated messages in a variety of formats and specialized content areas. Service Learning Option. (DMA, JRN elective)

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.

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.

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.

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.

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. (Field 5 – Social Sciences course)

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. (Ethics attribute)

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.

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.

COM 361 Introduction to Television Production **3 credits**

Studio techniques, lighting, sound recording, set design, electronic graphics and editing, production of live and edited programs in studio. (DMA elective)

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)

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)

PROGRAM OF STUDY COMMUNICATION STUDIES

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.

COM 385 Television and 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.

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.

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.

COM 414 Issues in Integrated Marketing Communication **3 credits**

(formerly Issues in Advertising)

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. Prerequisite: senior status.

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.

COM 488 Internship I Seminar

3-12 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 488/498 combined. Prerequisite: Open to junior and senior majors with GPA of at least 2.50 and Communication Studies average of 2.70 and approved by department faculty. Information about the internship application process is available on the Communication Studies Department website.

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 498. Prerequisite: Same as for COM 488.

PROGRAM OF STUDY

COMMUNICATION STUDIES

COM 499 Independent Study **3 credits**

Student conducts original project or self-designed course of study under the tutelage of Communication Studies faculty member. Open to junior and senior majors in good standing with consent of instructor, chair and associate dean; offered only in very specific circumstances.

Note: Students may also earn Communication Studies credit for the following courses offered through other programs. Please see course descriptions in the respective major/program pages in this catalog.

Course	Title	Credits
DMA 201	Introduction to Digital Media	3
DMA 215	Digital Media Culture	3
DMA 216	Digital Media Law/Ethics	3
DMA 212	2D Graphics	3
DMA 217	Interaction Design	3
DMA 310	Digital Audio/Music Production	3
DMA 342	Introduction to Web Design	3
DMA 385	Digital Filmmaking	3
DMA 442	Advanced Web Design	3
FAS 140*	Introduction to Still Photography	3
FAS 141*	Digital Photography	3
FAS 142*	Travel Photography	3
FAS 240*	Color Photography	3
FAS 241*	Intermediate Photography	3
JRN 310	Journalism I	3
JRN 311	Advanced Journalism/Newsroom	3
JRN 322	Feature/Magazine Writing	3
JRN 336	Sports Journalism	3
JRN 369	Television Features	3

*Only 6 credits of FAS photography courses can be applied as COM elective credit.

PROGRAM OF STUDY COMMUNICATION STUDIES

COMPUTER SCIENCE

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 web 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 artificial intelligence, web development, software engineering, databases, operating systems, and distributed computing.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/computer-science/index.dot>

Learning Goals and Objectives

For Learning Goals and Objectives please go to <http://www.canisius.edu/computer-science/learning-goals-objectives/>

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. All students must complete a minimum of 120 credit hours to graduate.

Advisement

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. Majors should work closely with their advisors to develop their academic programs, discuss career expectations, choose their major electives, and plan their co-curricular or supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours. Computer Science majors often benefit from taking additional mathematics, computing, or Digital Media Arts courses as well as courses in ethics or logic.

Major Required Courses

Course	Title	Credits
CSC 111/L	Introduction to Programming	4
CSC 112/L	Data Structures	4
CSC 213/L	Large Scale Programming	4
CSC 253/L	Computer Hardware	4
CSC 281	Automata and Algorithms	3
CSC 310/L	Information Organization and Processing	4
CSC 320	The Social Impact of Computing	3
CSC 330/L	Distributed Computing	4
CSC 351/L	Comparative Programming Languages	4
CSC 360/L	Intelligent Systems	4
CSC 395/L	Software Engineering	4

Major Elective

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.

PROGRAM OF STUDY

COMMUNICATION STUDIES

Recent electives include

CSC 313/L Advanced Programming Topics
CSC 325/L Graphics
CSC 380/L Web Development
CSC 400/L Special Topics in Computing
BIF 400/L Advanced Algorithms
MAT 341 Numerical Analysis

Required Mathematics Courses

MAT 111 Calculus I (4)
MAT 191 Discrete Mathematics or MAT 230 Logic, Sets,
Proofs (4)

Students must complete one of the following two tracks:

Interdisciplinary Track

Completion of an approved minor in another department or program

Science Track

MAT 112 Calculus II (4)
2-semester science major sequence with lab:
BIO 111/L-112/L (8), CHM 111/L-112/L (8), or
PHY 223/L-224/L (8)
MAT 141 Inferential Statistics and Computers for Science (4)
or MAT 219 Linear Algebra (4) or MAT 351 Probability and
Statistics (3)

PROGRAM OF STUDY
COMMUNICATION STUDIES

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
CSC 111/L MAT 111 or MAT 109	4 4 4	CSC 112/L Track course If needed MAT 110	4 4 4
Sophomore		Sophomore	
CSC 213/L CSC 253/L or 281 Track course	4 4 3	MAT 191 CSC 253/L or 281 Track course	4 4 3
Junior		Junior	
CSC Elective (take 1 elective in junior or senior year) Track course		CSC 310/L CSC 330/L	4 4
Senior		Senior	
CSC 360/L Track course, if needed	4	CSC 320 CSC 351/L CSC 395/L	3 4 4

PROGRAM OF STUDY COMMUNICATION STUDIES

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 many cases additional course work may be required. In order to declare a dual major, the student must complete a dual major request form and obtain the signature of each department chairperson and the appropriate associate dean. In the past, Computer Science majors have had dual majors in many other areas, including Physics, Mathematics, Digital Media Arts, Religious Studies, English and Classics.

Minors: *Two Minors are offered*

Computer Science Minor (5 courses, 18-20 credits)		
Course	Title	Credits
CSC 111/L	Introduction to Programming	4
CSC 112/L	Data Structures	4
CSC 213/L	Large Scale Programming	4
	One course at the 300 or 400 level, chosen after consulting with an advisor	3-4
	One additional Computer Science course	3-4
Computer Theory Minor (5 courses, 18-20 credit hours)		
CSC 111/L	Introduction to Programming	4
CSC 112/L	Data Structures	4
CSC 281	Automata and Algorithms	3
MAT 191	Introduction to Discrete Mathematics	4
	Mathematics	3-4
	One additional Computer Science course	

Many courses at the 200-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.

2015 – 2017 COMPUTER SCIENCE COURSES

CSC 108/L Introduction to Web Computing 4 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. (Field 7, Ethics Attribute) *Fall/Spring*

CSC 109/L Robotics Introduction to Computer Science 4 credits

Introduction to computer science through robotics, the basics of artificial intelligence and the fundamental ideas of logic, algorithms, computer systems and programming. Includes ethical issues in robotics. (Field 7, Ethics Attribute)

CSC 111/L Introduction to Programming 4 credits

Algorithms, programming, computers, and applications to problem solving in Python. Open to all students. (Field 7). *Fall/Spring*

CSC 112/L Data Structures 4 credits

Basic concepts of data structures, including lists, stacks and queues. Object-Oriented programming and design, user-defined structures and abstract data types in Python. Prerequisites: C or better in CSC 111/L. *Fall/Spring*

CSC 127/L Introduction to Game Design 4 credits

Computer game development and underlying computer concepts necessary for game design. Game components related to the player, stories, characters, game play, graphics, the interface and audio. (Field 7, Oral Communication Attribute) *Fall 2015*

PROGRAM OF STUDY COMMUNICATION STUDIES

CSC 213/L Large Scale Programming 4 credits

Introductory concepts of software engineering applied to the design and implementation of larger software systems. Advanced data structures. Intensive instruction in Java including graphics and OO design. Prerequisites: CSC 112/L. *Fall 2017/ Spring 2016*

CSC 253/L Computer Hardware 4 credits

Introduction to digital logic, Boolean algebra, hardware and computer organization. Overview of current architectures. Prerequisites: CSC 111/L. *Fall 2015/Fall 2017*

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: 112/L. *Fall 2017/Spring 2016*

CSC 310/L Information Organization and Processing 4 credits

Databases, high-level organization and processing of information, SQL, and ethical use of information. Prerequisites: CSC 112/L. *Fall 2015/Spring 2018*

CSC 313/L Advanced Programming Topics 4 credits

Focuses on the practice of computer science by investigating emerging development techniques from industry. Topics include design patterns, application profiling, code optimization and testing techniques. Prerequisites: CSC 213/L.

CSC 320 – The Social Impact of Computing 4 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. Prerequisites: CSC 112/L. (Core Capstone) *Spring*

CSC 325/L Computer Graphics 4 credits

Techniques involved in realistic image production including illumination models, object modeling, shadowing, texturing, ray tracing, radiosity, animation and advanced modeling techniques for natural phenomenon and characters. Prerequisites: CSC 112/L. *Fall 2017*

CSC 330/L Distributed Computing 4 credits

System software and distributed applications. Modern distributed operating systems, client/server and other models and security issues. Prerequisites: CSC 112/L and CSC 253/L. *Fall 2015/Spring 2018*

CSC 351/L Comparative Programming Languages 4 credits

Systematic study of programming languages and their implementations. Programming in logical and functional programming languages is included. Prerequisites: CSC 112/L. *Spring 2017*

CSC 360/L Intelligent Systems 4 credits

An introduction to intelligent systems including logic and rule-based systems, machine learning, and applications of AI. Prerequisites: CSC 112/L. *Fall 2016*

CSC 380/L Web Development 4 credits

Web design principles, programming and scripting (both client-side and server-side), database access, client/server mechanisms, search engines, copyright and ethical issues, security. Prerequisites: CSC 111/L and junior/senior standing. *Fall 2016*

CSC 391-491 Computer Science Seminar 1 credit

Topic-focused exploration involving students and faculty.

CSC 395/L Software Engineering 4 credits

The application of engineering principles to the design, production, use and maintenance of software is studied through readings and a team project. Prerequisites: CSC 213/L. (Oral Communication Attribute) *Spring 2017*

CSC 400 Special Topics in Computing 3-4 credits

Current topics of interest to faculty and students. Possible topics: cryptography, advanced scripting languages, networking, etc. Prerequisites: 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. 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.

CSC 499 Independent Study 1-4 credits

Prerequisite: Permission of chair.

PROGRAM OF STUDY CREATIVE WRITING

CREATIVE WRITING

Director: Mick Cochrane, PhD
Associate 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.

Prerequisites for 200-level and above English courses: FYS 101 and English 101, 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 <http://www.canisius.edu/creative-writing/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/creative-writing/learning-goals-objectives/>

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. All students must complete a minimum of 120 credit hours to graduate.

Advisement

Creative writing faculty advisors work closely with students regarding course selection and career opportunities.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at: <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

Course	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 major capstone seminar	3
Three of the following creative writing courses:		
ENG 342	Writing Young Adult Fiction	3
ENG 388	Literary Publishing	3
ENG 391	Advanced Creative Writing: Fiction	3
ENG 392	Advanced Creative Writing: Poetry	3
ENG 393	Advanced Creative Writing: Memoir	3
ENG 411	Playwriting	3
ENG 498	Internship	3

PROGRAM OF STUDY CREATIVE WRITING

Major Electives

Three literature courses (9 credits)

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.

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
Sophomore		Sophomore	
ENG 294	3	Creative Writing elective	
ENG 299	3	American Literature requirement	
Junior		Junior	
Creative Writing elective		Creative Writing elective	
British Literature requirement		Contemporary Literature requirement	
Senior		Senior	
ENG 490	3	Literature elective	
Literature elective		Literature elective	

PROGRAM OF STUDY CREATIVE WRITING

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean.

Minors

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:

Total 5 Courses

Course	Title	Credits
ENG 294	Introduction to Creative Writing	3
Three of the following creative writing courses:		
ENG 342	Writing Young Adult Fiction	3
ENG 388	Literary Publishing	3
ENG 391	Advanced Creative Writing: Fiction	3
ENG 392	Advanced Creative Writing: Poetry	3
ENG 393	Advanced Creative Writing: Memoir	3
ENG 411	Playwriting	3
ENG 498	Internship	3
ENG 490	Creative Writing major capstone seminar	3

2015 – 2017 CREATIVE WRITING COURSES

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. (Field 3, Advanced Writing Intensive)

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.

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.

ENG 391 Advanced Creative Writing: Fiction 3 credits

Workshop for experienced writers in fiction. Prerequisite: ENG 294 with a grade of B or above or permission of instructor. (Advanced Writing Intensive)

ENG 392 Advanced Creative Writing: Poetry 3 credits

Workshop for experienced writers in poetry. Prerequisite: ENG 294 with a grade of B or above or permission of instructor.

ENG 393 Advanced Creative Writing: Memoir 3 credits

Workshop for experienced writers in memoir. Prerequisite: ENG 294 with a grade of B or above or permission of instructor. (Advanced Writing Intensive)

ENG 411 Playwriting 3 credits

The playwriting process. Brief review of dramatic technique and theory, followed by working through the process from germinal idea to finished playscript. (Field 3, Advanced Writing Intensive)

ENG 490 Creative Writing Senior Capstone 3 credits

Focus on preparation of a portfolio of polished work, creation of an artistic statement, submission and public presentation of professional work, and the practice of reading as a writer.

PROGRAM OF STUDY DIGITAL MEDIA ARTS

DIGITAL MEDIA ARTS

Director: Przemyslaw J. Moskal, PhD

Introduction

The Digital Media Arts (DMA) program, offered through the Communication Studies Department, 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 Studies, Business/Marketing, Computer Science, Fine Arts and others. For more information, please go to <http://www.canisius.edu/dma/>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/dma/learning-goals-objectives/>

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 adviser in the major and should contact the department directly to have an adviser assigned if they do not already have one. All majors should work closely with their adviser 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 Communication Studies Department faculty adviser in the fall of their freshman year.

Curricular Requirements for the Major Core Curriculum

In addition to DMA major requirements, all students complete Core Curriculum requirements as part of their overall Canisius education. For more information, please visit: <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours. Digital Media Arts majors are encouraged to explore a diverse range of free electives to help them develop content and understand the broad industry applications of digital media.

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.

Major Courses

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: <http://www.canisius.edu/dma/courses/>

PROGRAM OF STUDY DIGITAL MEDIA ARTS

Course	Title	Credits
DMA 201	Intro 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

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:

Concentration	Course	Credits
Graphic Design	DMA 393: Advertising Design	3
Web Design	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 Elective Courses by Concentration

In addition to DMA core courses, 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 an 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:

Course	Title	Credits
DMA 384	Typography	3
DMA 395	Digital Illustration	3
DMA 363	Print Design	3
DMA 393	Advertising Design (Senior Project and Portfolio requirement)	3
Qualified Non-DMA courses:		
COM 311	Principles of Advertising	3
COM 315	Advertising and the Creative Process	3
CSC 325	Computer Graphics	3
FAS 110	Two-Dimensional Design	3
FAS 130	Three-Dimensional Design	3
FAS 120	Drawing I	3
FAS 142	Travel Photography	3
FAS 140	Introduction to Still Photography	3
FAS 150	Color	3
FAS 170	Painting I	3
PHI 325	Philosophy of Art and Beauty	3

PROGRAM OF STUDY DIGITAL MEDIA ARTS

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:

Course	Title	Credits
DMA 342	Intro to Web Design	3
DMA 370	Designing for Mobile Devices	3
DMA 442	Advanced Web Design (Senior Project and Portfolio requirement)	3
Qualified Non-DMA courses:		3
CSC 108	Intro to Web Computing	3
CSC 111	Intro to Programming	3
CSC 380	Web Development	3
FAS 141	Digital Photography	3
ISB 455	E-Commerce and Web Site Design	3
ISB 470	Cybersecurity	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:

Course	Title	Credits
DMA 385	Digital Filmmaking	3
DMA 387	Commercial Filmmaking & Video	3
DMA 399	Social Documentary (Core Capstone & Senior Project and Portfolio requirement)	3
DMA 309	Music Technology	3
DMA 310	Digital Audio/Music Production	3
Qualified Non-DMA courses:		3
COM 325	Media Literacy	3
COM 328	Scriptwriting	3
COM 361	Introduction to TV Production	3
COM 373	Best Picture: Academy Awards	3
COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genres: Thrillers/Comedies	3
COM 491, 492, 493	Video Institute I, II, III	3
ENT 201	Introduction to Entrepreneurship	3
PHI 397	Philosophy & Film	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.

PROGRAM OF STUDY DIGITAL MEDIA ARTS

For more information about Game Design concentration, please e-mail Dr. P.J. Moskal (moskalp@canisius.edu)

Game Design Courses:

Course	Title	Credits
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 (Senior Project and Portfolio requirement)	3
Qualified Non-DMA courses:		3
CSC 111	Intro to Programming	3
CSC 127	Introduction to Game Design	3
CSC 212	Data Structures	3
CSC 325	Computer Graphics	3
CSC 360	Intelligent Systems	3
FAS 120	Drawing I	3
FAS 131	Sculpture I	3
FAH 109	History of Architecture	3
PHI 325	Philosophy of Art and Beauty	3

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean. Students may complete a dual or multiple major in Communication Studies, Computer Science, or Journalism by completing the college requirements for any other such dual or multiple major. In addition, students need to

complete a dual major form (available in the department office) which is signed by appropriate department chairs and program directors. IMPORTANT: Students should carefully examine the rules for dual majors in the department handbook (available in the department office).

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

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: <http://www.canisius.edu/dma/learn/>

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.

PROGRAM OF STUDY DIGITAL MEDIA ARTS

2015 – 2017 DIGITAL MEDIA COURSES

DMA 201 Intro 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. (Field 3)

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: DMA 201 or permission of instructor.

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 prerequisite for all 300 level production courses that are part of the Game Design concentration. Prerequisite: DMA 201 or permission of instructor. (Field 3)

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. (Field 3)

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.

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.

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: DMA 201 or permission of instructor.

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 PSA's, as well as typographic effects and logo spins for movie trailers, video intros and promotional digital marketing projects.

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.

DMA 342 Intro 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.

PROGRAM OF STUDY

DIGITAL MEDIA ARTS

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: 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: 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: DMA 213 or permission of instructor.

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. Prerequisites: DMA 214 Digital Design Concepts or DMA 212 2D Graphics.

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: DMA 201 or permission of instructor.

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: DMA 201 or permission of instructor.

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: 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: DMA 201 or permission of instructor.

PROGRAM OF STUDY DIGITAL MEDIA ARTS

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: DMA 201 or permission of instructor.

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: 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: DMA 201 or JRN 201, or permission of instructor. (Core capstone)

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: DMA 342 or CSC 108, or DMA 217, or permission of instructor.

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: DMA 351 or DMA 354, or DMA 371, or permission of instructor.

DMA 488 Internship I Seminar **3-12 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 488/498 combined. Prerequisite: Open to junior and senior majors with GPA of at least 2.50, Digital Media Arts average of 2.70 and approved by department faculty. Applications on Communication Studies Department website. *Fall/Spring*

DMA 498 Internship II Seminar 3-9 credits

Sequel to DMA 488 for students taking a second internship. Each student is limited to a combined total of 12 credit hours for DMA 488 and 498. Prerequisite: Same as for DMA 488. *Fall/Spring*

PROGRAM OF STUDY
DUAL DEGREE PROGRAM (BA/BS-MBA)

DUAL DEGREES — WEHLE
SCHOOL OF BUSINESS

BA/BS and MBA

**Laura McEwen, Assistant Dean of Wehle School of Business
Director, Wehle School of Business MBA Program**

This program enables qualified students in most majors to earn an undergraduate degree and a Master's in Business Administration (MBA) within a five-year period. 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, they complete their undergraduate requirements and use their free electives to take a series of introductory graduate courses. They complete the MBA requirements in the fifth year.

Students may have to take more than the normal 15 credit hours per semester in the fourth year in order to satisfy the requirements of their undergraduate major and complete the MBA program by the summer of their fifth year. This will depend upon the number of credit hours remaining in their undergraduate program at the beginning of the fourth year.

Waivers for MBA classes are based on equivalent courses taken at Canisius College. MBA courses in economics, statistics and accounting may be waived for students who achieve a grade of B or higher in ECO 101-102, ECO 255-256, and ACC 201-202 (or 211-212) respectively. MBA courses in organizational behavior, marketing, operations management and finance may be waived for students in those majors. See Dean McEwen for further information on waivers.

Admission

Application is made by students in the spring semester of their junior year. The Graduate Management Admission Test (GMAT) is required. Admission to the program will require meeting current MBA admission standards.

Since individual programs of study are custom designed, interested students should see Laura McEwen, the Director of the MBA program, as early as possible in their academic careers. The graduate section of the program is designed specifically for each student on the basis of his/her undergraduate experience and will vary from student to student. Hence, early and continuous advisement is important. Students in majors with relatively few free electives, e.g. business, science or education, are especially encouraged to see Dean McEwen early in their academic careers to ensure timely completion of required courses.

For further information, students should contact Laura McEwen, Assistant Dean of the Wehle School of Business and Director of the MBA Program.

PROGRAM OF STUDY ECONOMICS AND FINANCE

ECONOMICS

Chair: Mark P. Zaporowski, PhD

Introduction

Economics B.A. 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, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/economics-finance/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/economics-finance/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a 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 chairperson directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

One Field of Knowledge 7 Mathematics Course:		
Course	Title	Credits
MAT 105 and MAT 106 or MAT 115 or MAT 111	Finite Mathematics Calculus for the Non-Sciences Calculus for Business I Calculus I	3 3 4 4

(MAT 115 is recommended over MAT 106. Additional mathematics is recommended if the student is preparing for a graduate program in economics or finance. The student should consult a departmental advisor).

PROGRAM OF STUDY ECONOMICS AND FINANCE

Course	Title	Credits
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 205	Intermediate Microeconomics Analysis	3
ECO 206	Intermediate Macroeconomics Analysis	3
ECO 255	Business Statistics I	3
ECO 256	Business Statistics II	3
Economics electives: Five courses at the 300 or 400 level		

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, 211, 219, 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.

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

Economics majors may also obtain a concentration in Finance by using Economics electives to take the following courses: FIN 201, FIN 311, FIN 312, FIN 414, and 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.

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
FYS 101 ECO 101 MAT 105 or MAT 115 or MAT 111 RST 101 Free Elective	3 4	ENG 101 ECO 102 MAT 106 or Free Elective if MAT 115/111 PHI 101 Free Elective	3
Sophomore		Sophomore	
ECO 205 ECO 255 Field of Knowledge 4 Free Elective Free Elective	3 3	ECO 206 ECO 256 ECO Elective Free Elective Free Elective	
Junior		Junior	
ECO Elective Field of Knowledge 1 Field of Knowledge 3 Field of Knowledge 6 Free Elective		ECO Elective Field of Knowledge 2 Free Elective Free Elective Free Elective	
Senior		Senior	
ECO Elective Core Capstone Free Elective Free Elective Free Elective		ECO Elective Free Elective Free Elective Free Elective Free Elective	

PROGRAM OF STUDY

ECONOMICS AND FINANCE

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 course work may be required. In order to declare a dual major, the student must complete the Majors and Minors Declaration Form and get the signatures of each department chairperson or Program Director.

The Economics-Mathematics dual major 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 are also available with history, urban studies, international relations and other areas.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

Economics Minor (21 credits)

Course	Title	Credits
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 255	Business Statistics I	3

Economics electives: Four courses at the 200, 300, or 400 level one of which must be ECO 205 or ECO 206. (12 credits)

PROGRAM OF STUDY
ECONOMICS AND FINANCE

BUSINESS ECONOMICS

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. The Business Economics major program in the Richard J. Wehle School of Business requires, in addition to the major courses, a business core curriculum that provides the student with a common body of business knowledge. It is anticipated that Economics majors will gain sufficient training in methods of economic analysis to be able to help solve the numerous economic problems of society.

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.

Learning Goals and Objectives

The goals and objectives of the Economics BS major parallels that of the BA degree program in Economics. The differentiation focuses on a career inside a modern corporation, requiring immersion in the Wehle School of Business core curriculum. For learning goals and objectives please go to <http://www.canisius.edu/economics-finance/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in Business 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 chairperson directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY ECONOMICS AND FINANCE

Major Courses

Common body of business knowledge:		
Course	Title	Credits
MAT 105 and MAT 106 or MAT 115 or MAT 111	Finite Mathematics Calculus for the Non-Sciences Calculus for Business I Calculus I	3 3 4 4
<i>(MAT 115 is recommended over MAT 106. Additional courses in mathematics are recommended if the student plans to attend a graduate program in economics or finance. The student should consult a departmental advisor.)</i>		
ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 255	Business Statistics I	3
ECO 256	Business Statistics II	3
FIN 201	Introduction to Finance	3
ISB 101	Management Technology	3
MGT 101	Introduction to Management	3
MGT 325	Operations Analysis for Business	3
MGT 370	Managerial Environment	3
MGT 446	Managerial Policy Strategy	3
MKT 201	Principles of Marketing	3
Economics major:		
ECO 205	Intermediate Microeconomic Analysis	3
ECO 206	Intermediate Macroeconomic Analysis	3
Economics electives:	Four courses at the 300 or 400 level	

Major Electives

Up to 2 of the following courses (with a minimum grade of C- in each) may be substituted for Economics elective credit: MAT 112, 211, 219, 222 and/or Accounting courses beyond ACC 202. All 300 and 400 level Finance courses serve as Economics electives.

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. All business majors must complete a two course sequence of classes that emphasize either a modern language or a non-U.S. culture. If students elect to satisfy the requirement by taking language courses, the courses must be in the same modern language. 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. Both classes must be related to the same culture (e.g. two courses about Asian history, two courses about European culture, two Latin American or Hispanic courses, etc.)

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

Restricted electives – must be courses from the School of Arts and Sciences (A&S): 4 courses

Free Electives: 3 or 4 courses

ECO 455 and additional Mathematics courses are strongly recommended for students wishing to obtain graduate degrees in Economics and Finance.

PROGRAM OF STUDY
ECONOMICS AND FINANCE

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
FYS 101 ECO 101 MAT 105 or MAT 115 or MAT 111 RST 101 Business International Requirement I	3 4	ENG 101 ECO 102 MAT 106 or Free Elective if MAT 115/111 PHI 101 Business International Requirement II	
Sophomore		Sophomore	
ACC 201 ECO 205 ECO 255 ISB 101 Field of Knowledge 4		ACC 202 ECO 206 ECO 256 FIN 201 MGT 101	
Junior		Junior	
ECO Elective MKT 201 Field of Knowledge 1 Field of Knowledge 3 Field of Knowledge 6		ECO Elective MGT 325 MGT 370 Field of Knowledge 2 (Ethics) A&S Elective	
Senior		Senior	
ECO Elective Core Capstone A&S Elective Free Elective Free Elective		ECO Elective MGT 446 A&S Elective A&S Elective Free Elective	

PROGRAM OF STUDY

ECONOMICS AND FINANCE

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean.

Dual majors in Economics (BS) and Finance are required to take six electives in total. Two must be Economics electives and four must be Finance electives.

2015 – 2017 ECONOMICS COURSES

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. (Field 5)

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. (Field 5)

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. Prerequisites: ECO 101-102.

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. Prerequisites: ECO 101-102.

ECO 255 Business Statistics I 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. (Field 7)

ECO 256 Business Statistics II 3 credits

Hypothesis testing, regression analysis, goodness of fit, contingency tables, analysis of variance, time series analysis and forecasting. Prerequisite: ECO 255. (Field 7)

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. Prerequisites: ECO 101-102 or permission of the instructor.

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. Prerequisites: ECO 101-102.

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. Prerequisites: ECO 101-102.

PROGRAM OF STUDY
ECONOMICS AND FINANCE

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. Prerequisites: ECO 101-102.

ECO 333 Economics of Public Issues 3 credits

This course uses economic principles to analyze an array of public policy issues, providing insights into public policy, the effects of policy on the behavior of consumers and producers, the costs and benefits of specific policies and the distribution of these costs and benefits. Current policy debates, such as income inequality and poverty, pollution and environmental issues, health care, international trade and education are analyzed. Prerequisites: ECO 101-102.

ECO 401 Public Finance 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 102.

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. Prerequisites: ECO 101-102, ECO 256 or equivalent.

ECO 455 Econometrics 3 credits

Estimation and analysis of linear and non-linear regression models using statistical inference. Topics include multicollinearity, heteroskedastic and serially correlated errors, forecasting, dummy variables and simultaneous equations models. Emphasis on analysis of data using EViews statistical software. Prerequisites: ECO 205-206, ECO 256 or equivalent.

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. Prerequisites: ECO 101-102.

ECO 497 Internship 3 credits

May be used for Economics elective credit. Pass/Fail only. Student must complete a WSB Internship Application Form and obtain the approval of a faculty supervisor, department chair and the associate dean.

ECO 499 Independent Research 3 credits

Student must complete an Independent Study Application Form and obtain the approval of a faculty supervisor, department chair and the associate dean.

PROGRAM OF STUDY ECONOMICS AND FINANCE

FINANCE

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), Certified Financial Planners (CFP) and Insurance Brokers. 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 <http://www.canisius.edu/economics-finance/overview/finance/>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/economics-finance/learning-goals-objectives/>

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. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

Common body of business knowledge:

Course	Title	Credits
MAT 105 and MAT 106 or MAT 115 or MAT 111	Finite Mathematics Calculus for the Non-Sciences Calculus for Business I Calculus I	3 3 4 4

(MAT 115 is recommended over MAT 106. Additional mathematics is recommended if the student is preparing for a graduate program in economics or finance. The student should consult a departmental advisor.)

PROGRAM OF STUDY

ECONOMICS AND FINANCE

Course	Title	Credits
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 255	Business Statistics I	3
ECO 256	Business Statistics II	3
ISB 101	Management Technology	3
FIN 201	Introduction to Finance	3
MGT 101	Introduction to Management	3
MGT 325	Operations Analysis for Business	3
MGT 370	Managerial Environment	3
MGT 446	Managerial Policy Strategy	3
MKT 201	Principles of Marketing	3
Finance major:		
FIN 311	Corporate Finance	3
FIN 312	Investments	3
FIN 414	Portfolio Management	3
Finance electives: Four courses at the 300 or 400 level		12

Major Electives

Up to 2 of the following courses (with a minimum grade of C- in each) may be substituted for Finance elective credit: MAT 112, 211, 219, 222 and/or Accounting courses beyond ACC 202. Some 300 and 400 level Economics courses serve as Finance electives. See the department chair for an up-to-date list of Economics courses that qualify.

Major Experiences

The Golden Griffin Fund (GGF) is a real money investment fund run by Canisius students under the guidance of designated faculty members and local investment industry advisors. The fund selects students from applicants in the spring of their junior year for year-long participation during their senior year. The student researches firms (under appropriate guidance) for possible inclusion in the GGF portfolio. Students who have completed this year-long experience have had exceptional success in securing employment in high-profile companies.

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.

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. All business majors must complete a two course sequence of classes that emphasize either a modern language or a non-U.S. culture. If students elect to satisfy the requirement by taking language courses, the courses must be in the same modern language. 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. Both classes must be related to the same culture (e.g. two courses about Asian history, two courses about European culture, two Latin American or Hispanic courses, etc.)

Additional Course Considerations

- FIN 455 Financial Modeling and/or FIN 457 Quantitative Financial Analysis 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.
- Restricted electives (must be liberal arts) 4 courses
- Free Electives (3 or 4 courses)

PROGRAM OF STUDY
ECONOMICS AND FINANCE

Recommended Semester Schedule for Major Course Requirements

Year	Fall Semester	Spring Semester
Freshman	FYS 101	ENG 101
	ECO 101	ECO 102
	MAT 105 (3 credits) or MAT 115 (4 credits) or MAT 111	MAT 106 (3 credits) or Free Elective if MAT 115/111
	RST 101	PHI 101
	ISB 101	MGT 101
Sophomore	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
Junior	FIN 311	FIN 414
	FIN 312	FIN Elective
	MGT 325	Field of Knowledge 1
	Field of Knowledge 2 (Ethics)	A and S Elective
	Field of Knowledge 6	A&S Elective
Senior	FIN Elective	FIN Elective
	FIN Elective	MGT 446
	MGT 370	A&S Elective
	Core Capstone	Free Elective
	A&S Elective	Free Elective

PROGRAM OF STUDY

ECONOMICS AND FINANCE

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean.

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.

2015 – 2017 FINANCE COURSES

FIN 201 Introduction to Finance **3 credits**

An introduction to financial analysis. Topics covered include: financial statements, tools of financial analysis, bond and equity valuation, financial management. Prerequisites: ECO 101-102, ECO 255 or concurrent registration.

FIN 311 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.

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. Prerequisites: FIN 201, ECO 256.

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. Prerequisites: ECO 101-102.

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. Prerequisites: ECO 101-102, ECO 256 or equivalent.

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.

FIN 414 Portfolio Management **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. Prerequisites: FIN 311, FIN 312.

FIN 420 Financial Institutions and Markets **3 credits**

Examines the financial services industry and the role that financial intermediaries play in the rapidly changing marketplace. This course cannot be used as a major elective if you have already taken ECO 330. Prerequisite: FIN 201.

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.

PROGRAM OF STUDY
ECONOMICS AND FINANCE

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.

FIN 455 Financial Modeling 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 201.

FIN 457 Quantitative Financial Analysis 3 credits

Introduction to R, an open source statistical and computational software package that is widely used in Finance. Applications include ratio analysis, portfolio theory, CAPM, the Fama-French three factor model, basic option pricing, value at risk and Monte Carlo Simulation using publicly available financial data. Prerequisites: ECO 256, FIN 311.

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.

FIN 480 Derivative Securities 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. Prerequisites: FIN 311, FIN 312.

FIN 485 – FIN 486 Golden Griffin Fund 6 credits

This is 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. Prerequisites: FIN 311, FIN 312. Prerequisites or concurrent registration: FIN 412, FIN 414, FIN 420 or ECO 330, FIN 480. NOTE: GGF students are selected during an application process during the student's junior year.

FIN 497 Internship 3 credits

May be used for Finance elective credit. Pass/Fail only. Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean.

FIN 499 Independent Research 3 credits

Student must complete an Independent Study Application Form and obtain the approval of a faculty supervisor, department chair and the associate dean.

PROGRAM OF STUDY
EDUCATION

EDUCATION — EARLY
CHILDHOOD BIRTH-GR. 2

Chair: Michele Marable, PhD

Introduction

The Teacher Education Department offers teacher certification programs at a variety of levels. These programs include: Adolescence Education (see separate section in catalog), Early Childhood Education (birth through grade two); Childhood Education (grades one through six); dual certification in Early Childhood/Childhood Education (birth through grade six); and dual certification in Students with Disabilities/Childhood Education (grades 1 through 6). Each of these five programs requires candidates to select a 10-course academic concentration in one of eight disciplines: English, Mathematics, Music, Science, Social Studies, French, German or Spanish or an interdisciplinary concentration in Social Justice. Teacher candidates majoring in Childhood Education will be eligible to apply for a grade 7-9 certification extension in Middle Childhood if they have a concentration in English, Mathematics, Social Studies or a Modern Language.

The professional sequences in Early Childhood, Childhood, and Students with Disabilities give the prospective teacher a thorough foundation in the many facets of modern American 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.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities as well as transition points in the programs and portfolio requirements. Please go to <http://www.canisius.edu/teacher-ed/early-childhood/>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/teacher-ed/early-childhood/learning-goals/>

Qualifications

Students must meet the requirements at all transition points in order to graduate with an education degree and be recommended for teacher certification.

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. All majors should work closely with their advisor in discussing career expectations, choosing their coursework, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY
EDUCATION

Major Courses:

Course	Title	Credits
EDE 100	Human Growth and Social Development: Birth-Childhood	3
EDE 121	Introduction to Literacy, Children's Literature and the Arts	3
EDU 122	Technology in Education	3
EDY 208	Infant/Toddler Care & Education	3
EDY 209	Developmentally Appropriate Practices in EC Classrooms: Playing to Learn	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
EDU 250	Foundations of Education	3
EDY 306	Music, Movement, and the Arts in EC Classrooms	3
EDY 310	Teaching Math/Science in EC Classrooms	3
SPE 341	Inclusive Strategies	3
EDE 390	Cognition, Learning, and Assessment Birth-Childhood	3
ECCH 412	Managing the EC and Elementary Classroom	3
EDY 433	Seminar in Teaching and Assessment Birth-Childhood	3
EDY 493	Student Teaching EC	3
SPE 494	Capstone Seminar for Teacher Candidates	3
EDU 495	Child Abuse Seminar	0
EDU 496	Prevention of School Violence	0
EDU 497	Workshop Dignity for All Students Act (DASA)	0
EDU 498	Student Teaching Seminar	3

Additional Course Considerations

Early childhood majors need to choose one of the following academic concentrations: English, Mathematics, Music, Science, Social Justice, Social Studies, French, German or Spanish. A list of concentration courses is available at <http://www.canisius.edu/teacher-ed/concentrations/index.dot>

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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. 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.

PROGRAM OF STUDY
EDUCATION

CHILDHOOD EDUCATION

GR. 1-6

Chair: Michele Marable, PhD

Introduction

The Teacher Education Department offers teacher certification programs at a variety of levels. These programs include: Adolescence Education (see separate section in catalog), Early Childhood Education (birth through grade two); Childhood Education (grades one through six); dual certification in Early Childhood/Childhood Education (birth through grade six); and dual certification in Students with Disabilities/Childhood Education (grades 1 through 6). Each of these five programs requires candidates to select a 10-course academic concentration in one of eight disciplines: English, Mathematics, Music, Science, Social Studies, French, German or Spanish or an interdisciplinary concentration in Social Justice. Teacher candidates majoring in Childhood Education will be eligible to apply for a grade 7-9 certification extension in Middle Childhood if they have a concentration in English, Mathematics, Social Studies or a Modern Language.

The professional sequences in Early Childhood, Childhood, and Students with Disabilities give the prospective teacher a thorough foundation in the many facets of modern American 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.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities as well as transition points in the programs and portfolio requirements please go to <http://www.canisius.edu/teacher-ed/childhood-ed/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/teacher-ed/childhood-ed/learning-goals/>

Qualifications

Students must meet the requirements at all transition points in order to graduate with an education degree and be recommended for teacher certification.

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. All majors should work closely with their advisor in discussing career expectations, choosing their coursework, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY
EDUCATION

Major Courses:

Course	Title	Credits
EDE 100	Human Growth and Social Development: Birth-Childhood	3
EDE 121	Introduction to Literacy, Children's Literature and the Arts	3
EDE 122	Technology in Education	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
EDU 250	Foundations of Education	3
EDE 311	Science in the Schools	3
EDE 317	Teaching Math in Elementary Schools	3
EDE 331	Teaching Social Studies in Elementary Schools	3
SPE 341	Inclusive Strategies	3
EDE 390	Cognition, Learning, and Assessment Birth-Childhood	3
ECCH 412	Managing the EC and Elementary Classroom	3
EDY 432	Seminar in Teaching and Assessment Elementary	3
EDE 493	Student Teaching	12
ECCH 494	Capstone Seminar for Teacher Candidates	3
EDU 495	Child Abuse Seminar	0
EDU 496	Prevention of School Violence	0
EDU 497	Workshop Dignity for All Students Act (DASA)	0
EDU 498	Student Teaching Seminar	3

Major Electives

Candidates wishing to obtain an extension to teach grades 7-9 in their area of concentration (Biology, Chemistry, English, Mathematics, Physics, Social Studies, Spanish, French and German) must take EMC 352 Human Growth and Social Development: Middle Childhood and EMC 391 Cognition, Learning, Assessment and Diagnostic Teaching: Middle Childhood in addition to the courses listed above. The Science and Social Justice concentrations do not lead to middle school certification extensions.

Additional Course Considerations

Childhood majors need to choose one of the following academic concentrations: Biology, Chemistry, English, Mathematics, Musics, Physics, Science, Social Studies, French, German or Spanish. A list of concentration courses is available at <http://www.canisius.edu/teacher-ed/concentrations/index.dot>

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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. 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.

PROGRAM OF STUDY EDUCATION

EARLY CHILDHOOD/ CHILDHOOD

Chair: Michele Marable, PhD

Introduction

The Teacher Education Department offers teacher certification programs at a variety of levels. These programs include: Adolescence Education (see separate section in catalog), Early Childhood Education (birth through grade two); Childhood Education (grades one through six); dual certification in Early Childhood/Childhood Education (birth through grade six); and dual certification in Students with Disabilities/Childhood Education (grades 1 through 6). Each of these five programs requires candidates to select a 10-course academic concentration in one of eight disciplines: English, Mathematics, Music, Science, Social Studies, French, German or Spanish or an interdisciplinary concentration in Social Justice. Teacher candidates majoring in Childhood Education will be eligible to apply for a grade 7-9 certification extension in Middle Childhood if they have a concentration in English, Mathematics, Social Studies or a Modern Language.

The professional sequences in Early Childhood, Childhood, and Students with Disabilities give the prospective teacher a thorough foundation in the many facets of modern American 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.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities as well as transition points in the programs and portfolio requirements.

Please go to <http://www.canisius.edu/teacher-ed/dual-certification/>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/teacher-ed/childhood-ed/learning-goals/>

Qualifications

Students must meet the requirements at all transition points in order to graduate with an education degree and be recommended for teacher certification.

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. All majors should work closely with their advisor in discussing career expectations, choosing their coursework, developing their entire academic program and planning their co-curricular or supplemental academic experiences. Freshmen meet with upper class mentors as well to discuss coursework and co-curricular experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY EDUCATION

Major Courses:

Course	Title	Credits
EDE 100	Human Growth and Social Development: Birth-Childhood	3
EDE 121	Introduction to Literacy, Children's Literature and the Arts	3
EDU 122	Technology in Education	3
EDY 208	Infant/Toddler Care and Education	3
EDY 209	Developmentally Appropriate Practices in EC Classrooms: Playing to Learn	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
EDU 250	Foundations of Education	3
EDY 306	Music, Movement, and the Arts in EC Classrooms	3
EDE 311	Science in the Schools	3
EDE 317	Teaching Math in Elementary Schools	3
EDE 331	Teaching Social Studies in Elementary Schools	3
SPE 341	Inclusive Strategies	3
EDE 390	Cognition, Learning, and Assessment Birth-Childhood	3
ECCH 412	Managing the EC and Elementary Classroom	3
EDE 432	Seminar in Teaching and Assessment Elementary	3
ECCH 493	Student Teaching	12
ECCH 494	Capstone Seminar for Teacher Candidates	3
EDU 495	Child Abuse Seminar	0
EDU 496	Prevention of School Violence	0
EDU 497	Workshop Dignity for All Students Act (DASA)	0
EDU 498	Student Teaching Seminar	3

Major Electives

Candidates wishing to obtain an extension to teach grades 7-9 in their area of concentration (Biology, Chemistry, English, Mathematics, Physics, Social Studies, Spanish, French and German) must take EMC 352 Human Growth and Social Development: Middle Childhood (3); and EMC 391 Cognition, Learning, Assessment and Diagnostic Teaching: Middle Childhood (3) in addition to the courses listed. The Science and Social Justice concentrations do not lead to middle school certification extensions.

Additional Course Considerations

Childhood majors need to choose one of the following academic concentrations: Biology, Chemistry, English, Mathematics, Music, Physics, Science, Social Studies, French, German or Spanish. A list of concentration courses is available <http://www.canisius.edu/teacher-ed/concentrations/index.dot>

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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. 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.

PROGRAM OF STUDY
EDUCATION

SPECIAL EDUCATION
CHILDHOOD

Chair: Michele Marable, PhD

Introduction

The Teacher Education Department offers teacher certification programs at a variety of levels. These programs include: Adolescence Education (see separate section in catalog), Early Childhood Education (birth through grade two); Childhood Education (grades one through six); dual certification in Early Childhood/Childhood Education (birth through grade six); and dual certification in Students with Disabilities/Childhood Education (grades 1 through 6). Each of these five programs requires candidates to select a 10-course academic concentration in one of eight disciplines: English, Mathematics, Music, Science, Social Studies, French, German or Spanish or an interdisciplinary concentration in Social Justice. Teacher candidates majoring in Childhood Education will be eligible to apply for a grade 7-9 certification extension in Middle Childhood if they have a concentration in English, Mathematics, Social Studies or a Modern Language.

The professional sequences in Early Childhood, Childhood, and Students with Disabilities give the prospective teacher a thorough foundation in the many facets of modern American 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.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities as well as transition points in the programs and portfolio requirements.

Please go to <http://www.canisius.edu/teacher-ed/special-ed/>

Learning Goals and Objectives

For Learning Goals and Objectives please go to <http://www.canisius.edu/teacher-ed/special-ed/learning-goals/>

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. All majors should work closely with their advisor in discussing career expectations, choosing their coursework, developing their entire academic program and planning their co-curricular or supplemental academic experiences. Freshmen meet with upper class mentors as well to discuss coursework and co-curricular experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY
EDUCATION

Major Courses:

Course	Title	Credits
EDE 100	Human Growth and Social Development: Birth-Childhood	3
EDE 121	Introduction to Literacy, Children's Literature and the Arts	3
EDU 122	Technology in Education	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
SPE 291	Nature and Needs of EC Students with Learning Disabilities	3
SPE 292	Remedial Strategies for Teaching in the EC Content Areas	3
EDU 250	Foundations of Education	3
SPE 311	Nature/Needs of EC Students with Developmental Disabilities	3
SPE 312	Multidisciplinary Assessment and Teaching: EC	3
EDE 317	Teaching Math in Elementary Schools	3
EDE 390	Cognition, Learning and Assessment Birth-Childhood	3
SPE 330	Nature/Needs of EC Students with Behavior Disorders	3
SPE 335	Classroom Management in the Childhood Classrooms	3
SPE 432	Seminar in Teaching and Assessment	3
SPE1 494	Capstone Seminar for Teacher Candidates	3
EDU 495	Child Abuse Seminar	0
EDU 496	Prevention of School Violence	0
EDU 497	Workshop Dignity for All Students Act (DASA)	0
EDU 498	Student Teaching Seminar	3
SPE1 493	Student Teaching	12

Major Electives

Candidates wishing to obtain an extension to teach grades 7-9 in their area of concentration (Biology, Chemistry, English, Mathematics, Physics, Social Studies, Spanish, French and German) must take EMC 352 Human Growth and Social Development: Middle Childhood and EMC 391 Cognition, Learning, Assessment and Diagnostic Teaching: Middle Childhood in addition to the courses listed.

Additional Course Considerations

Childhood majors need to choose one of the following academic concentrations: Biology, Chemistry, English, Mathematics, Music, Science, Social Studies, French, German or Spanish. A list of concentration courses is available <http://www.canisius.edu/teacher-ed/concentrations/index.dot> (Adobe Acrobat PDF).

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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. 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.

2015 – 2017 EARLY CHILDHOOD, CHILDHOOD, AND SPECIAL EDUCATION COURSES

ECCH 221 Literacy I 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. *Fall/Spring*

ECCH 222 Literacy II 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.

PROGRAM OF STUDY EDUCATION

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.

EDE 121 Introduction to Literacy, Children's Literature and The Arts 3 credits

Focuses on the uses of children's books across all curriculum areas. Multicultural literature, authors, illustrators, genres and age-appropriateness are explored. Discusses basic approaches to literacy and the use of children's books in developing literacy. Emphasizes integrating the arts into the total curriculum.

EDE 311 Teaching Science in Elementary Schools 3 credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching science. Emphasizes content, inquiry skills, problem solving and scientific attitude highlighting the NY State Standards. Includes 20 hours of field experience in Grades 1-6.

EDE 317 Teaching Math in Elementary Schools 3 credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching mathematical concepts. Emphasizes content, inquiry skills and problem solving highlighting the New York State Standards.

EDE 331 Teaching Social Studies in Elementary Schools 3 credits

Addresses the objectives, curriculum, strategies, materials and evaluation necessary for teaching social studies content. Emphasizes historic, geographic, economic, political and social concepts highlighting the New York State Standards.

EDE 390 Cognition, Learning and Assessment – 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.

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.

EDE 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 childhood level. Requires 50 hours of field placement.

EDE 494 Capstone Seminar for Teacher Candidates 3 credits

Complements student teaching for education majors. Includes activities that demonstrate 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 related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes. Prerequisites: Signature, concurrent registration in Student Teaching.

EDY 494 Capstone Seminar for Teacher Candidates 3 credits

Complements student teaching for education majors. Includes activities that demonstrate 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 related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes. Prerequisites: Signature, concurrent registration in Student Teaching.

PROGRAM OF STUDY EDUCATION

ECCH 494 Capstone Seminar for Teacher Candidates **3 credits**

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SPE1 494 Capstone Seminar for Teacher Candidates **3 credits**

Complements student teaching for education majors. Includes activities that demonstrate 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 related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes. Prerequisites: Signature, concurrent registration in Student Teaching.

EDE 493 Student Teaching – CH **12 credits**

Highlights knowledge, skills, and dispositions of professional educators. Two full-time 7-week placements in childhood classrooms require candidates to become the instructional leader under the supervision of cooperating teachers and college faculty. Prerequisites: Signature

ECCH 493 Student Teaching – EC/CH **12 credits**

Highlights knowledge, skills, and dispositions of professional educators. One full-time 7-week placement in each childhood and early childhood classroom requires candidates to become the instructional leader under the supervision of cooperating teachers and college faculty. Prerequisites: Signature, concurrent registration in ECCH 494.

EDU 122 Technology in Education **3 credits**

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. *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.

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) **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.

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.

PROGRAM OF STUDY EDUCATION

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.

EDY 306 Music, Movement and the Arts in Early Childhood Classrooms 3 credits

Emphasizes the integration of music, movement, and the arts into the curriculum in K-6 classrooms. Explores various media and materials utilized to enrich learning and stimulate children's creativity.

EDY 310 Teaching Math/Science in Early Childhood Classrooms 3 credits

Focuses on inquiry methods, problem solving, and diagnostic teaching addressing the New York State standards. Emphasizes hands-on materials, visuals and other multi-model experiences in math/science learning in the early years. Requires 10 hours of field placement Grades 1-2.

EMC 352 Human Growth and Social Development: Middle Childhood 3 credits

Major concepts, principles, theories and research related to the intellectual, emotional, physical, social and moral development of young adolescents.

EMC 391 Cognition, Learning, Assessment and Diagnostic Teaching: Middle Childhood 3 credits

Concepts, standards and research related to middle level curriculum development stressing the importance of a curriculum that is relevant, challenging, integrative and exploratory. Interdisciplinary middle level curriculum standards and models will be introduced in addition to assessment strategies that promote the continuous intellectual, social and physical development of all young adolescents.

GEO 325 Introduction to Physical Geography 3 credits

Physical geography focuses on the reshaping of the Earth's surface through the many interactions that occur between the atmosphere, hydrosphere, lithosphere and biosphere. It entails an examination of the terrestrial and aquatic character of the Earth, its climate and biodiversity and the sources of energy that promote change. Ultimately, physical geography provides a panoramic view of our relationship to a physical setting that is undergoing constant modification.

SPE 100 Introduction to Special Education 3 credits

Presents the definitions, causes, psychological and behavioral characteristics of disabilities outlined in the IDEA. Emphasizes assessment procedures, multicultural issues, family involvement and the referral process.

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 100. Concurrent enrollment in SPE 292.

SPE 292 Remedial Strategies in the CH 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. Concurrent enrollment in SPE 291.

SPE 311 Nature and Needs of CH Students with Developmental Disabilities 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 and SPE 292. Concurrent enrollment in SPE 312

PROGRAM OF STUDY EDUCATION

SPE 312 Multidisciplinary Assessment and CH 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. Prerequisites: SPE 291 and SPE 292. Concurrent enrollment in SPE 311.

SPE 330 Nature and Needs of CH 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, 312. Concurrent enrollment in SPE 335.

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. Prerequisites: SPE 311, 312. Concurrent enrollment in 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 to meet the diverse needs of learners.

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.

SPE1 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. Prerequisites: Signature, overall GPA of 2.50 to date, "C" in each required Education course, some schools may require certain health tests.

PROGRAM OF STUDY ENGLISH

ENGLISH

Chair: Mark Hodin, PhD

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 English department is vitally committed to student learning in the Canisius Core Curriculum. Writing About Literature (English 101), a required foundations course in the Core, 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 or global awareness) and Core cross-disciplinary skills requirements (in oral communication or advanced writing intensive).

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. English 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.

Prerequisites for 200-level and above English courses: FYS 101 and English 101, or permission of the department chair. Acting courses (I and II) carry no prerequisites and are open to freshmen.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please see our department website at <http://www.canisius.edu/english/>

Learning Goals and Objectives

For Learning Goals and Objectives please go to <http://www.canisius.edu/english/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in English. All students must complete a minimum of 120 credit hours to graduate.

Advisement

Departmental faculty advisors work closely with students regarding course selection and career opportunities.

Curricular Requirements for the Major Core Curriculum

All students must complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY ENGLISH

Major Courses

Course		Credits
ENG 299	Introduction to English Studies	3
ENG 300 level	Shakespeare: (one)	3
ENG 300 level	British Literature before 1800: (one)	3
ENG 300 level	American Literature before 1900: (one)	3
ENG 200 level or ENG 300 level	Writing/Rhetoric: (one)	3
ENG 450	English major capstone seminar	3
200-level	English electives: 2 courses	6
English Major electives: 4 courses (3/4 at 300-level)		12

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 paper, 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 Honors program at <http://www.canisius.edu/english/english-honors/>

PROGRAM OF STUDY
ENGLISH

Recommended Semester Schedule for Major Course Requirements

Fall	Spring
Freshman	Freshman
Sophomore	Sophomore
200-level English elective 200-level English elective	ENG 299 Writing/Rhetoric or Major elective
Junior	Junior
Shakespeare Pre-1900 American Literature	Pre-1800 British Literature Writing/Rhetoric or Major elective
Senior	Senior
Major Elective Major Elective	English Major Senior Seminar Major Elective

PROGRAM OF STUDY ENGLISH

Dual Majors

Dual majors involving English are available in a large number of areas, including creative writing, communication, history, modern languages, philosophy, psychology, sociology, and biology. 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

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major.

The English Department offers four minors:

English Minor: 6 courses (For non-majors only. A six-course sequence that includes many of the basic requirements for English majors)		
Course	Title	Credits
English 200 level	Elective Course (one)	3
ENG 299	Introduction to English Studies	3
English 300/400 level	British Literature course (one)	3
English 300/400 level	American Literature course (one)	3
English 300 level	Shakespeare course (one)	3
English 200/300/400 level	Writing/Rhetoric (one)	3

The Writing Minor: 5 courses (for majors and non-majors)		
Course	Title	Credits
ENG 401	Texts, Context, and Subtext (offered every other spring)	3
ENG 498	Internship (one of the student's choice, with advice of a faculty supervisor)	3
Electives: Chose three of the following. No more than one of the following courses may be taken for the minor: ENG 294, ENG 342, ENG 411		
ENG 205	Varieties of the Essay	3
ENG 294	Creative Writing	3
ENG 342	Writing Young Adult Fiction	3
ENG 385	Persuasive Writing	3
ENG 383	Research Writing	3
ENG 388	Literary Publishing	3
ENG 389	Business Communication	3
ENG 411	Playwriting	3

PROGRAM OF STUDY
ENGLISH

Creative Writing Minor

5 courses (For both majors and non-majors. 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 on Creative Writing at Canisius, please see www.canisius.edu/creativewriting/

Course	Title	Credits
Required Courses:		
ENG 294	Introduction to Creative Writing	3
ENG 490	Creative Writing Capstone	3
Required: Three of the following Creative Writing Courses:		
ENG 342	Young Adult Fiction	3
ENG 388	Literary Publishing	3
ENG 392	Advanced Creative Writing: Poetry	3
ENG 411	Playwriting	3
ENG 494	Advanced Creative Writing: Fiction	3
ENG 496	Advanced Creative Writing: Memoir	3
ENG 498	Internship	3

Theatre Arts Minor

5 Courses (For both majors and non-majors. A five-course sequence that includes course work in acting and production as well as in dramatic literature and playwriting.)

Course	Title	Credits
ENG 147 or ENG 148	Acting I Acting II	3 3
ENG 202	Drama	3
ENG 346 or ENG 350	Introduction to Theatre The Theatre Experience	3 3
ENG 411 or or ENG 498	Playwriting Theatre arts elective Theatre arts elective Internship	3 3 3 3

2015 – 2017 ENGLISH 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.

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. (Field 3, Oral Communication Attribute)

ENG 148 Acting II 3 credits

Continuation of Acting I. (Field 3, Oral Communication Attribute)

ENG 201 Poetry 3 credits

Introductory survey of poetry for majors and non-majors. (Field 3, Advanced Writing Intensive)

ENG 202 Drama 3 credits

Introductory survey of drama for majors and non-majors. (Field 3, Advanced Writing Intensive)

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. (Field 3, Advanced Writing Intensive)

ENG 208 Novel 3 credits

Introductory survey of the novel for majors and non-majors.

PROGRAM OF STUDY ENGLISH

ENG 211 Science Fiction (Field 3, Advanced Writing Intensive) 3 credits

Survey of science fiction for majors and non-majors. (Field 3, Advanced Writing Intensive)

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. (Field 3)

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. (Field 3 and Advanced Writing Intensive)

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 (Field 3, Advanced Writing Intensive)

ENG 220 Contemporary Catholic Fiction 3 credits

Study of novels and short stories by Catholic American writers from 1950 to the present, such as Flannery O'Connor, Walker Percy, Mary Gordon and Andre Dubus. (Field 3)

ENG 221 Hallowed Houses in American Literature 3 credits

American literature that emphasizes place as embodied in houses-haunted or otherwise esteemed. (Field 3, Diversity, Advanced Writing Intensive)

ENG 223 Images of Women in Literature and Film 3 credits

Representations of women as major characters in literature and film. (Field 3, Advanced Writing Intensive)

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. (Field 3, Global Awareness, Advanced Writing Intensive)

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. (Field 3, Diversity, Advanced Writing Intensive)

ENG 230 The Bible as Literature 3 credits

A study of the Bible as literary text and cultural source, integrating film, painting and sculpture as representations of biblical images for interpretation. (Field 3, Advanced Writing Intensive)

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. (Field 3, Advanced Writing Intensive)

ENG 264 Short Fiction 3 credits

Detailed investigation of various modes of short fiction to develop students' ability to read, comprehend and appreciate short fiction through an understanding of its techniques. (Field 3)

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. (Field 3, Advanced Writing Intensive)

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.

ENG 303 Medieval Literature 3 credits

A survey of the major voices of medieval British literature centering on Chaucer.

ENG 305 Seventeenth Century Literature 3 credits

A survey of the poetry and prose of major British authors from the Renaissance to the Restoration.

PROGRAM OF STUDY ENGLISH

ENG 306 Eighteenth Century Literature 3 credits

A survey of the poetry and prose of major British authors in the "long" eighteenth century.

ENG 307 English Gothic Novel 3 credits

Characterized by opposing forces: knowledge and mystery, good and evil, the beautiful and the sublime, light and dark, these novels often dramatize psychological, social and sexual conflict.

ENG 308 Nineteenth Century British Literature 3 credits

A survey of the major works and authors of the Romantic and Victorian periods.

ENG 309 Modern and Contemporary British Literature 3 credits

A survey of representative figures and genres in British literature of the twentieth-century and beyond.

ENG 311 Women Writers 3 credits

Works by women writers from all periods and backgrounds.

ENG 314 Chaucer 3 credits

Studies the major works, including *The Canterbury Tales*.

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)

ENG 316 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. (Diversity)

ENG 317 Heroes and Heroines in American Literature 3 credits

A study of uniquely American heroic types, including the Alger hero, the western hero and the picaresque hero. Representative texts studied in detail, in historical and cultural context.

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.

ENG 321 Child and Adolescent Hero in American Literature 3 credits

Examines child and adolescent heroes in American literature from post-Civil War period to the present. Texts explore major themes in American literature, from Mark Twain on.

ENG 322 Shakespeare I 3 credits

Introductory survey for majors. Plays drawn from the categories of comedy, tragedy and history.

ENG 323 Shakespeare II 3 credits

Works selected with emphasis on specific themes, structures, or styles. Shakespeare I is not a prerequisite.

ENG 325 British Women Writers 3 credits

A survey of British women writers in different genres and historical periods.

ENG 331 Studies in Irish Literature 3 credits

An historical survey focused mainly on twentieth century Irish writers. An aim of the course is to define Irish literature and identify its distinguishing features.

ENG 333 James Joyce's Ulysses 3 credits

Semester-long seminar in the study of the novel.

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. (Diversity)

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.

ENG 346 Introduction to Theater 3 credits

The collaborative efforts of theater, play and audience to create the theater experience. Exploration of the development of modern theater from its ritualistic roots to modern times. (Field 3)

PROGRAM OF STUDY ENGLISH

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.

ENG 348 English Novel II **3 credits**

Major British novels from the nineteenth and twentieth centuries.

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.

ENG 365 Core Capstone **3 credits**

Themed courses that integrate core curriculum attributes and skills. For majors and non-majors. Topics vary by semester and include "Culture and Conflict: Re-Interpreting World War I," "Memoir: Individual and Culture," and "Post-Colonial Literatures."

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. (Field 3, Diversity)

ENG 369 Contemporary 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. (Field 3)

ENG 371 Special Topics in Drama **3 credits**

Selected plays chosen by the instructor to elucidate the nature of the dramatic genre or sub-genre, or to study a specific historical period, such as modern Irish drama.

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.

ENG 375 Studies in Literary Criticism **3 credits**

Selected works studied in the context of critical theory, aesthetics, or the history of literary criticism; for example, "New Historicism and 19th Century American literature" or "Cultural Studies and the Cold War."

ENG 376 Film as Literature **3 credits**

An exploration of the relationship between two distinct aesthetic forms: film and literature. The course relies heavily on the original written text and then explores the film director's interpretation of the literary work. (Field 3)

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. (Global Awareness)

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. (Field 3, Diversity)

ENG 385 Persuasive Writing **3 credits**

Analysis and construction of arguments. Readings on issues in law, politics and education. (Advanced Writing Intensive)

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.

ENG 389 Business Communication **3 credits**

Practice in writing letters, memos and reports, with models and strategies offered for each form. (Advanced Writing Intensive)

ENG 392 Advanced Creative Writing Poetry **3 credits**

Workshop for experienced writers in poetry. Prerequisite: ENG 294 with a grade of B or above or permission of instructor.

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.

PROGRAM OF STUDY ENGLISH

ENG 401 Texts, Contexts and Subtexts 3 credits

The dynamic of rhetorical situations. Observations/ practical writing in rhetorical theory, writing process theory, writing and thinking, sociocognitive theory. Writing is both creative and analytical. (Advanced Writing Intensive)

ENG 402 Creativity and Composition Theory 3 credits

A writing theory course that addresses a variety of composing patterns and strategies found in the invention, development and revision of writing for different purposes and audiences. (Advanced Writing Intensive)

ENG 411 Playwriting 3 credits

The playwriting process. Brief review of dramatic technique and theory, followed by working through the process from germinal idea to finished playscript. (Field 3, Advanced Writing Intensive)

ENG 450 English Senior 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.

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: ENG 294 with a grade of B or above or permission of instructor.

ENG 391 Advanced Creative Writing: Fiction 3 credits

Workshop for experienced writers in fiction. Prerequisite: ENG 294 with a grade of B or above or permission of instructor. (Advanced Writing Intensive)

ENG 393 Advanced Creative Writing: Memoir 3 credits

Workshop for experienced writers in memoir. Prerequisite: ENG 294 with a grade of B or above or permission of instructor. (Advanced Creative Writing Intensive)

ENG 497 English Honors Thesis 3 credits

ENG 498 Internship 3 credits

ENG 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. Prerequisite: Permission of the instructor, department chair, and associate dean.

PROGRAM OF STUDY ENGLISH AS A SECOND LANGUAGE

ENGLISH AS SECOND LANGUAGE

Chair: Barbara J. Porter, PhD

Introduction

The English as a Second Language (ESL) Program at Canisius is a part-time program intended to assist all international students with the improvement of their English language skills. Our ESL Program is not an intensive language program, but a special academic support program designed to assist both exchange students visiting for a study abroad experience and international students seeking a degree.

All international students, including both exchange students and degree seeking students, must have their language skills evaluated. Students are initially screened based on application materials including scores on TOEFL or IELTS as well as transcripts indicating coursework in English at other institutions. Those students whose test scores and other documentation suggest language competency at approximately a high intermediate level will be waived from testing. Students without TOEFL, IELTS and other internationally recognized documentation will be asked to complete a comprehensive language assessment test given during International Student Orientation. Students with limited documentation and low TOEFL or IELTS scores will also be tested. This allows us to identify the best course work for each student's needs. Students who demonstrate advanced proficiency in English on the placement test will place out of ESL courses.

Courses are offered in all four language areas including reading, writing, speaking and listening. The purpose of these courses is to assist students with the development of the language skills they will need in both academic and social settings. Classes are small and provide not only language instruction but social support. Some students are still developing basic English language skills and take introductory ESL courses exclusively in the first semester. On some occasions, usually in the first semester, students with less than ideal language competencies can take as many as 12 credits of ESL in preparation for more demanding and challenging content courses. Most students find it an advantage to combine a number of ESL courses

with carefully selected content courses as they adjust to the demands of student in another language. In all instances, matriculating students can use ESL courses to fulfill free elective credit requirements. Some ESL courses fulfill core curriculum requirements. Exchange students who need ESL courses will use those courses for transfer back to their home institution.

For more information on the ESL program and resources for English language learners please go to <http://www.canisius.edu/english-as-second-language/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/english-as-second-language/goals/>

Advisement

International exchange students are advised by the appropriate Associate Dean or an advisor designated by the Associate Dean. International students seeking a degree should have an advisor in their major and should contact the department directly to have an advisor assigned if they do not already have one. All majors should work closely with their advisor(s) in their major(s) in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

2015 – 2017 ESL COURSES

ESL 111 The Craft of Writing I

3 credits

Beginning level. Focus on mastering the writing process. Review of the basics of sentence and paragraph structure. Focus on organizing and developing short essays (1-2 pages) using key rhetorical patterns. Participation in writing workshops. Emphasis on appropriate use of vocabulary, idioms, grammar and sentence structure. *Fall/Spring as needed*

ESL 112 The Craft of Writing II

3 credits

Intermediate level. Focus on mastering the writing process. Review of the basics of sentence and paragraph structure. Focus on organizing and developing short essays (2-4 pages) using key rhetorical patterns. Practice with writing research based essays. Participation in writing workshops. Emphasis on appropriate use of vocabulary, idioms, grammar and sentence structure. *Fall/Spring as needed*

PROGRAM OF STUDY
ENGLISH AS A SECOND LANGUAGE

FYS 101 Perspectives on Culture and Identity 3 credits

Intermediate to advanced level. Designed for a cross cultural audience, allowing both International and American students the chance to discuss how the places where we live or travel and the cultures which surround us – including virtual culture – influence our view of the world and our identities. Practice crafting thesis driven essays supported by research. *Fall/Spring as needed*

ESL 114 The Art of Reading I 3 credits

This course is intended to help students in all majors to improve their reading skill. Readings will be selected from various publications in areas which reflect the nature of academic and professional reading challenges including history, literature and art, social sciences and sciences, religion and philosophy. *Fall*

ESL 115 The Art of Reading II 3 credits

This course is intended to help students in all majors to improve their reading skill. Readings will be selected from various publications in areas which reflect the nature of academic and professional reading challenges including history, literature and art, social sciences and sciences, religion and philosophy. ESL 115 may be taken as a sequel to ESL 114. *Spring*

ESL 116 The Art of Conversation I 3 credits

Students will participate in exercises ranging from dialogues to brief presentations. Emphasis on accurate communication of meaning as well as practice listening for main ideas and supporting evidence. Practice in asking and answering questions, understanding and responding appropriately to conversations with a partner and with multiple speakers in small groups. Practice in effective note taking. *Fall*

ESL 117 The Art of Conversation II 3 credits

Students will participate in exercises ranging from dialogues to brief presentations. Emphasis on accurate communication of meaning as well as practice listening for main ideas and supporting evidence. Practice in asking and answering questions, understanding and responding appropriately to conversations with a partner and with multiple speakers in small groups. Practice in effective note taking. *Spring*

ESL 118 The Art of Oral Presentations 3 credits

Students in this course will learn to develop and give polished oral presentations. Practice with formal presentations including PowerPoint, visual aids and question and answer sessions. Emphasis on research based presentations. *Fall/Spring*

ESL 449 and ESL 599 Independent Study 3 credits

ESL 449 and ESL 549 are intended for students with special instructional needs. (Dean's permission only)

PROGRAM OF STUDY ENTREPRENEURSHIP

ENTREPRENEURSHIP

Director: Ji-Hee Kim, PhD

Introduction

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/entrepreneurship/index.dot>

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;
2. manage an existing family business for growth; and/or
3. 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.

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/entrepreneurship/learning-goals-objectives/>

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. 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 Requirements for the Major Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY

ENTREPRENEURSHIP

Major Course Requirement

Course	Title	Credits
Common body of business knowledge: 17-18 courses)		
MAT 105 and MAT 106 or MAT 111 or MAT 115	Finite Mathematics Calculus for the Non-Science Calculus I Calculus for Business I	3 3 4 3
Business International requirement (see description below)		6
ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 255	Business Statistics I	3
ECO 256	Business Statistics II	3
FIN 201	Introduction to Finance	3
ISB 101	Management Technology	3
MGT 101	Introduction to Management	3
MGT 325	Operations Analysis for Business	3
MGT 370	Managerial Environment	3
MGT 446	Managerial Policy/Strategy	3
MKT 201	Principles of Marketing	3
Entrepreneurship Major Curriculum		
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
ENT 201	Introduction to Entrepreneurship	3
ENT 401	Small Business Management and Entrepreneurship	3
ENT 402	New Venture Creation	3

Course	Title	Credits
Major Electives		
Entrepreneurship electives: (3 courses)		
ENT 311	Entrepreneurship and Family Business	3
ENT 312	International Entrepreneurship	3
ENT 314	Social Entrepreneurship and Not-for-Profit Sector Enterprise	3
ENT 414	Franchising and Entrepreneurship	3
ENT 496	Internship in Entrepreneurship	3
ENT 497	Entrepreneurial Summer Internship in Korea	3
ENT 499	Independent Study in Entrepreneurship	3
MGT 307	U.S. Business History	3
MGT 360	Organizational Behavior	3
MGT 364	Human Resources Management	3
MGT 380	International Business Seminar	3
MGT 434	Technology Management	3
MGT 437	Project Management	3
MGT 472	Comparative Management Systems (International)	3
MKT 474	Doing Business in Canada	3
MKT 320	Consumer Behavior	3
DMA 201	Introduction to Digital Media Arts	3
Restricted Electives (must be in Arts and Sciences) 4 courses		
Free Electives (2 or 3 courses)		

The following courses are strongly recommended as Entrepreneurship electives: ENT 311, 312, 314, 414.

PROGRAM OF STUDY

ENTREPRENEURSHIP

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. All business majors must complete a two course sequence of classes that emphasize either a modern language or a non-U.S. culture. If students elect to satisfy the requirement by taking language courses, the courses must be in the same modern language. 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. Both classes must be related to the same culture (e.g. two courses about Asian history, two courses about European culture, two Latin American or Hispanic courses, etc.) 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.

Entrepreneurship Major – Outside-the-classroom Experiences

Students are strongly encouraged to participate in a variety of entrepreneurship-related outside-of-classroom programs during their undergraduate careers. Some examples are:

1. Canisius Entrepreneurs Organization (CEO): Student members develop entrepreneurial leadership and professional communication skills through team building and teamwork as well as knowledge in entrepreneurship by planning and implementing educational outreach and experiential entrepreneurship projects. CEO teams are guided by faculty advisors and supported by businesses and not-for-profit organizations in the community.
2. MYLINKFACE: A student-run social entrepreneurship venture to which entrepreneurship majors contribute. MYLINKFACE utilizes dynamic and interactive online multimedia to teach English to foreign students seeking to improve their skills in conversational English. This organization schedules convenient on-line video classes in which Canisius College students and certified native English-speaking teachers instruct the foreign students.
3. Annual Empire Creativity Competition: Teams of students have an opportunity to pitch their business ideas to a panel of judges and a chance to win cash prizes. Ideas may be at any stage of development from creation of concepts or ideas to helping an established business.
4. Partnership with the Canisius College Women's Business Center (WBC): Academic and other practical experience is reinforced through a working relationship with the Canisius College Women's Business Center. Entrepreneurship Majors and local entrepreneurs are regularly invited to presentations and activities sponsored by the WBC.

PROGRAM OF STUDY
ENTREPRENEURSHIP

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
FYS 101	3	ENT 101	3
MAT 105	3	MAT 106	3
or		or	
MAT 111	3	Arts and Science Elect if MAT 115/111	3
or		ECO 102 MICRO	3
MAT 115	3	ENG 101	3
RST 101		Business International Requirement	3
ECO 101 MACRO (Social Science Field of Knowledge 5)	3		
Business International Requirement			
Sophomore		Sophomore	
ENT 201	3	MGT 101	3
ACC 201	3	ACC 202	3
ISB 101	3	PHI 101	3
History (Field of Knowledge 4)	3	Arts (Field of Knowledge 3)	3
ECO 255 STATS 1 (Field of Knowledge 7)	3	ECO 256 STATS 2	3
Junior		Junior	
ENT elective	3	ENT elective	3
FIN 201	3	ENT 401	3
MKT 201	3	MGT 325	3
Natural Science (Field of Knowledge 6)	3	Philosophy (Field of Knowledge 2 with Ethics attribute)	3
Religion (Field of Knowledge 1)	3	Arts and Sciences Elective	3
Senior		Senior	
ENT 402	3	Free Elective	3
ENT Elective	3	Free Elective	3
MGT 370	3	MGT 446	3
Core capstone	3	Arts and Sciences Elective	3
Arts and Sciences Elective	3	Free Elective	3

PROGRAM OF STUDY ENTREPRENEURSHIP

Dual Majors

Students are encouraged to combine entrepreneurship with another discipline for a dual major. The interdisciplinary nature of the entrepreneurship program makes it very effective for the students to fulfill a dual major. Science and technology fields also hold great potential for entrepreneurs. The decision regarding 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 advising. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in many cases additional course work may be required. In order to declare a dual major, the student must complete the Majors & Minors Declaration form and get the signature of each department chairperson or program director.

Minors

Students who wish to expand their educational backgrounds may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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 Majors & Minors declaration form and obtain the signatures of the appropriate department chair or program director.

2015 – 2017 ENTREPRENEURSHIP COURSES

Required Entrepreneurship 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 Pitch and Empire Creativity Competition." No prerequisite. Open to business and non-business majors including students from the College of Arts and Sciences and the School of Education and Human Services. (Core Curriculum Attributes: Oral Communication Skills)
Spring only

ENT 201 Introduction to Entrepreneurship 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. *Fall only*

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. Prerequisites: MGT 101 and MKT 201 or ENT 201, FIN 201, ACC 202 and junior standing. *Spring only*

ENT 402 New Venture Creation (Entrepreneurship Major Capstone course — NOT Canisius College Core Curriculum Capstone course) 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. Prerequisites: ENT 401 and senior standing. *Fall only*

PROGRAM OF STUDY ENTREPRENEURSHIP

Elective Courses In Entrepreneurship

Note: Additional entrepreneurship electives may be offered. Students should consult the semester-specific Registration and Advisement Guide and/or their academic advisor.

ENT 311 Entrepreneurship and Family Business 3 credits **Entrepreneurship and Family Business (ENT 311)**

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. Prerequisites: MGT 101 and MKT 201 or ENT 201 and junior standing. *Fall only*

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. Prerequisites: MGT 101 and MKT 201 or ENT 201 and junior standing. May be used as ENT and/or IBUS elective. *Spring only*

ENT 314 Social Entrepreneurship and Not-for-Profit Sector Enterprise 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. Core Curriculum Attributes: Justice. Prerequisites: MGT 101 and MKT 201 or ENT 201 and junior standing. *Spring only*

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. Prerequisites: MGT 101 and junior standing. *Fall only*

ENT 496 Internship in Entrepreneurship 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. Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean. *Fall/Spring*

ENT 497 Entrepreneurial Summer Internship in Korea 3 credits

Global business demands an international perspective. Students in the program are encouraged to participate in an international entrepreneurial summer internship in Korea. This may take place at one of the many international and entrepreneurial agencies and companies in South Korea. Non-routine job experiences that link academic concepts with practical experience. Requires supervision by the Director of Entrepreneurship and student demonstration of academic value through practical work experiences, papers, and reports. This course can be used as an ENT elective, and/or study abroad in Korean credits. Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean.

ENT 499 Entrepreneurship Independent Study 3 credits

Student must complete an Independent Study Application Form and obtain the approval of a faculty supervisor, department chair and the associate dean.

PROGRAM OF STUDY
ENVIRONMENTAL SCIENCE

ENVIRONMENTAL SCIENCE

Director: Katie Costanzo, PhD
Faculty: Robert Grebenok, Jonathan O'Brien,
Steven Szczepankiewicz

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 is designed to have an interdisciplinary focus with required and recommended courses coming from biology, chemistry, geology, philosophy and social sciences. In addition, it is designed to provide needed 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 go to <http://www.canisius.edu/enviro-science/index.dot>

Learning Goals and Objectives

For learning goals please go to <http://www.canisius.edu/enviro-science/learning-goals-objectives/>

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. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All Environmental Science majors are assigned advisors within the program. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their internships and co-curricular or supplemental academic experiences. The advisor may be changed at the student's request.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours. 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 Theological Ethics and Environmental Justice (RST 342).

PROGRAM OF STUDY
ENVIRONMENTAL SCIENCE

Major Course Requirements

Course	Title	Credits
BIO 111/111L	Introductory Biology I and Lab	4
BIO 112/112L	Introductory Biology II and Lab	4
BIO 211/211L	Biochemistry and Cell Biology I and Lab	4
CHM 111/111L	General Chemistry I and Lab	4
CHM 112/112L	General Chemistry I and Lab	4
CHM 227/227L	Organic Chemistry and lab	4
PSY 201 or MAT 141	Basic Statistics for Behavioral Science Inferential Statistics and Computers	3 4
PSY 401 or MAT 111	Advanced Statistics Seminar Calculus	3 4
BIO 320	Field Ecology	4
BIO 360	Environmental Health	3
CHM 232	Analytical Environmental Chemistry	4
ENV 100	Introduction to Environmental Science Seminar	1
ENV 200	Introductory Hydrology and Lab	4
ENV 352	Environmental Science Seminar II	1
ENV 498-499	Environmental Science Internship I and II	3/3
GEOL 120	Introductory Geology and Lab	4

Major Electives

Students must complete four of the following (at least three with labs):

BIO 212/212L	Biochemistry and Cell Biology II and Lab	4
BIO 305/305L	Microbiology: An Environmental Perspective and Lab	4
BIO 322	Conservation Biology	3
BIO 335	Plant Biology and Lab	4
BIO 343	Entomology	4
BIO 365	Vertebrate Zoology and Ecology	4
BIO 366	Ornithology	4
BIO 370	Plant Morphology	4
BIO 371	Behavioral Ecology	3
BIO 375	Community Ecology	4
BIO 377	Freshwater Biology	4
BIO 378	Wetlands	3
CHM 301	Classical Physical Chemistry	4
ECO 310	Introduction to Geographic Information Systems	3
PHY 201	General Physics I with lab	4

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, Iroquois National Wildlife Refuge, Penn Dixie Paleontological and Outdoor Education Center, Tiffitt 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.

PROGRAM OF STUDY ENVIRONMENTAL SCIENCE

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean. 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

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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. Your advisor will be able to assist with course planning to facilitate a minor, so please let your advisor know if you are considering a minor.

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.

2015 – 2017 ENVIRONMENTAL SCIENCE COURSES

ENV 100 Introduction to Environmental Science Seminar **1 credit**
Introduction to the field. Career information included. Required in freshman or sophomore year. *Spring 2017 only*

GEOL 120 Introductory Geology **4 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. Prerequisite: Students may not receive credit for both GEOL 120 and PHY 130. *Fall 2015 only*

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. Prerequisites: GEOL 120 and lab. *Spring 2016 only*

ENV 352 Environmental Science Seminar II **1 credit**
Students attend scientific talks and present information relevant to their internship experiences. Career preparations also included. *Offered every Spring*

ENV 401 Independent Research **3 credits**
Independent laboratory research in environmental science conducted under the supervision of a faculty member. Arrangements made prior to registration. Prerequisite: Written permission of faculty member. *Offered every semester*

ENV 498-499 Environmental Science Internship I and II **3 credits**
Practical experiences in the environmental sciences. Students must complete two internships in different areas of environmental sciences. Prerequisites: junior with a GPA of at least 2.0 in the major, a positive recommendation from a faculty member and a completed and approved internship application *Offered every semester*

PROGRAM OF STUDY ENVIRONMENTAL STUDIES

ENVIRONMENTAL STUDIES

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.

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 <http://www.canisius.edu/enviro-studies/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/enviro-studies/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Environmental Studies. 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. 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 and should make arrangements each semester to receive their registration PIN.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY ENVIRONMENTAL STUDIES

Major Courses

Course	Title	Credits
EVST 110	Science of Environmental Problems I	3
EVST 111	Science of Environmental Problems II	3
SOC 234	Environmental and Society	3
SOC 342 or PSC 217 or ANT 351	Social Research Methods Social Research Methods Qualitative Research Methods	3 3 3
RST 342 or PHI 244	Theological Ethics and Environmental Justice Environmental Ethics	3 3
ECO 101	Macroeconomics	3
ECO 310/311	Introduction to Geographic Information Systems	3
EVST 400	Environmental Studies Capstone	3

Major Electives

Students need to complete 5 additional courses: 4 courses from any of the designated major tracks; and EVST 498 Environmental Studies Internship (3).

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.

Course	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.

Course	Title	Credits
EVST 235	Environmental Policy and Green Theory	3
EVST 259	Environmental History of the United States	3
EVST 275	Global Environmental Problems	3
COM 302	Small Group Communication	3
BIO 135	Environmental Biology	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.

Course	Title	Credit
EVST 275	Global Environmental Problems	3
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
ENT 314	Social Entrepreneurship and Not-for-Profit Sector Enterprise	3
ISB 302	Sustainable Dynamics	3
MGT 440	Global Supply Chain Management	3
MGT 479	Current Topics in Global Supply Chain Management	3

PROGRAM OF STUDY ENVIRONMENTAL STUDIES

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.

Course	Title	Credits
EVST 275	Global Environmental Problems	3
COM 348	Environmental Communication	3
SOC 330	Health and Wellness	3
BIO 116	Disease, Myth and Reality	3
BIO 135	Environmental Biology	3

Major Experiences

Students are required to complete an internship with an environmental organization, EVST 498. Additionally, students are encouraged to pursue community based learning opportunities as they pertain to their interests and course selection.

Additional Course Considerations:

Fall	Credits	Spring	Credits
Freshman		Freshman	
EVST 110: Science of Environmental Problems I ECO 101: Principles of Macroeconomics	3 3	EVST 111: Science of Environmental Problems II	3
Sophomore		Sophomore	
SOC 342/PSC 217/ANT 351: Social Research Methods RST 342/PHI 244: Environmental Ethics	3 3	SOC 234: Environment and Society Track Option Elective	3
Junior		Junior	
ECO 310: Introduction to Geographical Information Systems Track Option Elective	3	Track Option Elective	
Senior		Senior	
EVST 498: Environmental Internship	3	Track Option Elective EVST 400: Capstone in Environmental Studies	3

PROGRAM OF STUDY ENVIRONMENTAL STUDIES

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

2015 – 2017 ENVIRONMENTAL SCIENCE COURSES

EVST 110/111 Science of Environmental Problems I and II **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. (Field 6)

ANT 351 Qualitative Research Methods **3 credits**

ECO 101 Principles of Macroeconomics **3 credits**

ECO 310 Introduction to Geographical Information Systems **3 credits**

PHI 244 Environmental Ethics **3 credits**

PSC 217 Social Research Methods **3 credits**

RST 342 Theological Ethics and Environmental Justice **3 credits**

SOC 234 Environment and Society **3 credits**

SOC 342 Social Research Methods **3 credits**

EVST 400 Environmental Studies Capstone **3 credits**

Senior Capstone experience course during which students will work in the community addressing an environmental issue, in partnership with a private or public environmental organization. Students will demonstrate an understanding of the foundations of environmental problems in society from an interdisciplinary approach.

EVST 498 Environmental Internship **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.

COURSE DESCRIPTIONS FOR SPECIALIZATION TRACK ELECTIVES

Environmental Justice

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. (Field 5)

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.

PROGRAM OF STUDY ENVIRONMENTAL STUDIES

PHI 245 Animal Ethics 3 credits

PSY 329 Leadership and Motivation 3 credits

SOC 273 Social Movements and Social Change 3 credits

SOC 340 Sociology of the City 3 credits

Environmental Conservation and Administration

BIO 135 Environmental Biology 3 credits

COM 302 Small Group Communication 3 credits

ENT 101 Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation 3 credits

EVST 235: Environmental Policy and Green Theory 3 credits

This seminar will explore key issues within green political theory. We will explore key debates such as eco-centrism versus anthropocentrism, animal rights, global justice and our obligations to future generations. Debates will include attitudes to the state, market and community from green perspectives, green democracy, justice and the "good life."

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. (Field 4)

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.

PSC 242 International Organizations 3 credits

Environmental Literacy and Public Health

BIO 116 Disease: Myth and Reality 3 credits

BIO 135 Environmental Biology 3 credits

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.

SOC 330 Perspectives on Health and Illness 3 credits

COM 348 Environmental Communication 3 credits

Sustainable Economics

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.

ENT 101 Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation 3 credits

ENT 314 Social Entrepreneurship and Not-for-Profit Sector Enterprise 3 credits

ISB 302 System Dynamics 3 credits

MGT 440 Global Supply Chain Management 3 credits

MGT 479 Current Topics in Global Supply Chain Management 3 credits

PROGRAM OF STUDY ETHICS AND JUSTICE

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.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please visit: <http://www.canisius.edu/philosophy/ethics-justice-minors/>

Learning Goals and Objectives

For learning goals and objectives please go to: <http://www.canisius.edu/philosophy/ethics-justice-minors/>

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.

Curricular Requirements for the Major Core

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Minors

Canisius College offers two minors from this program: a minor in Ethics and a minor in Justice.

The Ethics Minor Requirements

Students are required to complete a total of 16 credit hours, including 20 hours of service learning.

- Foundation course: PHI-241 Ethics – offered every year by the Department of Philosophy.
- Four three-credit hour ethics courses from a list of pre-approved elective courses (see below)
- A one-credit hour independent research project including a paper of around 15 pages written in collaboration with a professor who teaches within the Ethics Minor Program.
- 20 hours of a community-based learning experience completing over the course of the minor program.

PROGRAM OF STUDY ETHICS AND JUSTICE

The Justice Minor Requirements

Students are required to complete a total of 16 credit hours, including 20 hours of service learning.

- Foundation course: PHI-240 Justice – offered every year by the Department of Philosophy.
- Four three-credit hour justice courses from a list of pre-approved elective courses (see below).
- A one-credit hour independent research project including a paper of around 15 pages written in collaboration with a professor who teaches within the Justice Minor Program.
- 20 hours of a community-based learning experience completing over the course of the minor program.

Ethics Courses

Course	Title	Credits
CLS 300	Roman Law and Society	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 342	Theological Ethics & Environmental Justice	3
RST 345	Bio-Moral Problems	3

Justice Courses

Course	Title	Credits
CLS 300	Roman Law and Society	3
ENG 319	Captivity Narratives	3
HIS 230	The Holocaust	3
HIS 347	History of Marxism	3
HIS 390	Civil Rights Movement	3
ISGR 300	Immersion East Side	3
MGT 430	Sustainability & Supply Chains	3
PHI 247	Food and Agricultural Ethics	3
PHI 261	Philosophy of Law	3
PHI 267	Catholic Social Thought	3
PHI 271	Philosophy of Human Rights	3
PHI 272	Gender & Philosophy	3
PHI 274	Social & Political Philosophy	3
PSC 241	Human Rights & Globalization	3
PSC 244	War: Causes and Consequences	3
RST 234	Christians (En) Countering Injustice	3
RST 341	Catholic Social Ethics	3
SOC 273	Social Movements and Social Change	3

PROGRAM OF STUDY EUROPEAN STUDIES

EUROPEAN STUDIES

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 <http://www.canisius.edu/euro-studies/index.dot>

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.

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/euro-studies/learning-goals-objectives/>

Advisement

All students should be advised by the Program Director. All majors should work closely with their advisors in European Studies and their other major(s) in discussing career aspirations and options, choosing their major electives, developing their entire academic program and planning their co-curricular and study abroad experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and any major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

PSC 150 Comparative Government and Politics
or

Field 4 course on European history (1 course - 3 credits)

Major Electives

- History and Politics Major Electives (3 courses - 9 credits)
- European Foreign Language, Literature and Culture Major Electives (4 courses - 12 credits)
- European Studies Major Electives (2 approved courses from any field- 6 credits)

PROGRAM OF STUDY EUROPEAN STUDIES

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 at <http://www.canisius.edu/euro-studies/index.dot>.

PROGRAM OF STUDY
EUROPEAN STUDIES

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
FRC 215, GER 215 or SPA 215 PSC 150A or Field 4 Course on European History		FRC 217, GER 216 or SPA 217	
Sophomore		Sophomore	
Foreign Language, Literature and Culture Major Elective History and Politics Major Elective		Foreign Language, Literature and Culture Major Elective History and Politics Major Elective	
Junior		Junior	
European Studies Major Elective		History and Politics Major Elective	
Senior		Senior	
European Studies Major Elective			

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.

Minors

- PSC 150A Comparative Government and Politics or
- Field 4 course on European history (1 course - 3 credits)
- History and Politics Major Electives (2 courses - 6 credits)
- European Foreign Language, Literature and Culture Major Electives (3 courses - 9 credits)
- 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.

International Business

A special minor has been tailored to the needs and interests of students majoring in International Business. Consult the program director for details.

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.

PROGRAM OF STUDY FINE ARTS

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 major and a minor in art history, a major and a minor in music, and a minor in 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.

Art History

Introduction

A more detailed description of the program, faculty, facilities, academic, and co-curricular opportunities can be found at <http://www.canisius.edu/art-history/index.dot>

For Learning Goals and Objectives

Learning goals and objectives can be found at <http://www.canisius.edu/art-history/learning-goals-objectives/>

Qualifications

There is no minimum grade requirement in the major, but students must have a cumulative 2.0 in order to graduate with a degree in art history. 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 Fine Arts Department Chair directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Required Courses

Course	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
	Renaissance and/or Baroque art: one course	3
	Art since 1800: one course	3
	Non-Western or non-period based topic: one course	3
	One 300-level art history course	3
FAH 450	Senior Seminar	3

Major Electives

In addition to the above, majors complete four art history courses as electives (12 credits); dual majors complete two art history electives (6 credits). In addition to FAH courses, the following may be used as electives: COM 374, COM 375, COM 376, COM 479, FAS 110, FAS 120, FAS 130, FAS 150, PHI 397, and RST 314 (see below); other studio art courses will be considered upon approval of the department chair and the course instructor. A student may apply a maximum of two of these extra-departmental courses as electives to the art history major; one course if the student has a second major.

Major Experience

Many students take the opportunity to gain practical experience in an art institution through the Museum Internship course. Art history majors and minors have interned at the Albright-Knox Art Gallery, the Darwin Martin House, the Roycroft Campus, the Buffalo Central Terminal Restoration Corporation, Hallwalls, the Castellani Art Museum, CEPA, WNYBAC, and Big Orbit Gallery.

PROGRAM OF STUDY

FINE ARTS

Additional Course Considerations

All art history students are strongly encouraged to take courses in a foreign language since jobs and graduate programs in the field often require some familiarity with languages. Students interested in studying abroad are strongly encouraged to pursue two years of foreign language study in advance of their time abroad.

Recommended Semester Schedule for Major Course Requirements

Fall	Spring
Freshman	Freshman
FAH 101	FAH 102
Sophomore	Sophomore
Course in Renaissance and/or Baroque art Art history elective	Course in ancient and/or medieval art Art history elective
Junior	Junior
Non-Western or non-period based art history course* Museum Internship or art history elective	Course in art since 1800* Art history elective
Senior	Senior
300-level art history course*	Senior Seminar*

*300-level art history courses and Senior Seminar are offered infrequently. Students therefore might need to take these courses in their junior year and take their non-Western or non-period based art history course and a course in art since 1800 in their senior year.

PROGRAM OF STUDY

FINE ARTS

The following courses may be used as electives towards the art history major:

Course	Title	Credits
COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genre	3
COM 479	World Cinema	3
FAS 110	Two-Dimensional Design	3
FAS 120	Drawing I	3
FAS 130	Three-Dimensional Design	3
FAS 150	Color	3
PHI 291	Philosophy of Art and Beauty	3
RST 314	New Testament in Literature and Art	3

Other courses may also be eligible for inclusion in the art history major upon approval by the Fine Arts Department Chair.

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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. Dual majors are required to complete two art history electives rather than four, for a total of ten rather than twelve courses to complete the art history major. Most dual major combinations with art history can be completed within the minimum 120 credit hour degree requirement. 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

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

Art History Minor

The minor in art history requires eight courses, some of which may also fulfill requirements in the core curriculum or the student's major. Most art history minors can be easily completed within the minimum 120 credit hour degree requirement. Students must complete the appropriate minor request form.

Requirements for the Art History Minor

Course	Title	Credits
FAH 101	Introduction to Art History I	3
FAH 102	Introduction to Art History II	3
	Ancient and/or medieval art: one course	3
	Renaissance and/or Baroque art: one course	3
	Art since 1800: one course	3
	Non-Western or non-period based topic: one course	3
	One 300-level art history course	3
FAH 450	Senior Seminar	3

PROGRAM OF STUDY

FINE ARTS

2015 – 2017 ART HISTORY COURSES

Courses offered on a 4-year rotation. Please see department chair for course rotation schedule.

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. (Field 3, Global Awareness) *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. (Field 3, Global Awareness) *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. (Field 3, Diversity) *Fall*

FAH 107 Introduction to African and Asian Art **3 credits**

Introduction to the art of Africa, India, Japan, and China. Examines works from various time periods, geographic areas, religious orientations, and historical circumstances. (Field 3, Global Awareness) *Fall*

FAH 109 History of Architecture **3 credits**

Visual and cultural analysis of major monuments of global architecture from antiquity to the present. (Field 3, Global Awareness) *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. (Field 3, Global Awareness) *Fall*

FAH 159 Gender and Art **3 credits**

Introduction to selected artists in Western culture and analysis of issues involving the relationships among gender, representations of gender, and art in Western culture. (Field 3, Global Awareness) *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. (Field 3, Global Awareness) *Spring*

FAH 213 Greek and Roman Art **3 credits**

Visual and cultural analysis of the painting, sculpture, and architecture of Greece and Rome. (Field 3, Global Awareness) *Spring*

FAH 224 Medieval Art **3 credits**

Visual analysis, cultural analysis, and interpretation of major works of Early Christian, Byzantine, Islamic, Carolingian, Ottonian, Romanesque, and Gothic periods. (Field 3, Global Awareness) *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. (Field 3, Global Awareness) *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. (Field 3, Global Awareness) *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. (Field 3, Global Awareness) *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. (Field 3, Global Awareness) *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. (Field 3, Global Awareness) *Spring*

PROGRAM OF STUDY
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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. (Field 3, Global Awareness) *Spring*

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. Lecture and field trip format. (Field 3) *Summer*

FAH 350 Topics in Art History **3 credits**

Varying topics in art. Course will run as a seminar. Major or minor status or permission of the instructor required. (Advanced Intensive Writing) *Fall*

FAH 352 Museum Studies **3 credits**

Research, curatorial, and administrative aspects of museum management. Includes researching works of art, cataloging a collection, exhibits, budgets, and long-range planning. Major or minor status or permission of the instructor required. (Advanced Intensive Writing) *Fall*

FAH 450 Senior Seminar **3 credits**

For advanced art history students, to tie together experiences in the field and formalize their understanding of the discipline. Explores the history of art history and the status of institutions and professions within the art world. Junior and senior majors and minors. (Oral Communication) *Spring*

FAH 460 Museum Internship **3 credits**

Research, curatorial, and administrative internship at selected Buffalo area art galleries. Junior and senior majors and minors or permission of internship director required. *Fall/Spring/Summer*

FAH 480 Art, Beauty, and Terror in the 20th Century **3 credits**

Core Capstone. *Spring*

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. Prerequisite: Permission of the instructor, department chair, and associate dean.

PROGRAM OF STUDY

FINE ARTS

MUSIC

Introduction

The study of music develops and enhances analytical, creative, listening, and performing skills. Music majors choose a concentration in one of four sequences: music history and literature, music education, music technology, or music business (the sequence in music performance and the music major with a music business concentration curricula are described in separate catalog entries). Performance, both individual and ensemble, is an integral part of the Music Program: students may perform in the Chorale, Chamber Orchestra, Concert Band, Jazz Ensemble, and other ensembles; there also are many other opportunities for student performance. As an adjunct to the Music Program, the ArtsCanisius cultural series features concerts by faculty and guest artists that range from classical music to jazz. Students who would like to study music, but not as a major, may combine a music minor with another discipline or may choose the music concentration offered in the Early Childhood and Childhood Education Programs.

A more detailed description of the Music Program, faculty, facilities, academic, and co-curricular opportunities can be found at <http://www.canisius.edu/music/index.dot>

Learning Goals and Objectives

Learning goals and objectives can be found at <http://www.canisius.edu/music/learning-goals-objectives/>

Qualifications

A vocal or instrumental performance audition is required prior to formal acceptance into the major, but students may begin to take courses before the audition takes place (usually no later than the end of first academic year). In order to successfully complete the major, students must have a minimum grade of C- in each course included in the major. Students also must maintain a 2.0 overall average to graduate with a degree in music. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All music majors should contact the Fine Arts Department Chair for advisement. The advisor will work closely with majors in discussing career expectations, choosing their major electives, developing their entire academic program, and planning their co-curricular or supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours. With the permission of the chair, music majors may take an additional 8 credits of lessons and/or ensembles for free elective credit.

Major Requirements

Music majors complete required courses and electives, participate in ensemble for eight semesters, and fulfill one of the sequences listed below (the requirements for the performance sequence and the music major with a music business concentration are described in separate catalog entries).

PROGRAM OF STUDY
FINE ARTS

Required Courses

Course	Title	Credits
FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230/230L	Music Theory I and Lab	4
FAM 240/240L	Music Theory II and Lab	4
FAM 330/330L	Music Theory III and Lab	4
FAM 340/340L	Music Theory IV and Lab	4
FAM 450	Senior Seminar	3
FAM 226	Music performance: four semesters	8
FAM Music History Course Elective (choose one of the following)		
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

Music Ensemble (0-8 credits)

Majors must take the same ensemble for all eight semesters.

A student may take a music ensemble for one (1) credit

- FAM 181 Chorale
- FAM 182 Jazz Ensemble
- FAM 184 Chamber Orchestra
- FAM 185 Concert Band

or for zero (0) credit

- FAM 171 Chorale
- FAM 172 Jazz Ensemble
- FAM 174 Chamber Orchestra
- FAM 175 Concert Band

Students may opt for zero credit to avoid exceeding 18 credits in a semester.

Music Sequences

Students choose one of the following sequences (the performance sequence and music major with a music business concentration are listed separately).

History and Literature Sequence: 9 credits

Three additional music history courses (see list of music history courses below). Students following the history and literature sequence are strongly urged to take at least two semesters of French, German, or Italian.

Music Technology Sequence: 9 credits

- DMA 309 Music Technology
- DMA 310 Digital Audio/Music Production
- One music elective course

Music Education Sequence: 9 credits

- FAM 250 Music for Children
- FAM 350 Basic Conducting
- One music elective course

Music Business Sequence: 9 credits

- FAM 360 Music Business I
- FAM 361 Music Business II
- Choose either DMA 309 Music Technology or DMA 310 Digital Audio/Music Production

Note: DMA 309 and DMA 310 are offered in alternate years.

PROGRAM OF STUDY

FINE ARTS

Music History Courses and Music Elective Courses

Music history courses include the following:

- FAM 216 Medieval and Renaissance Music (3 credits)
- FAM 217 Music of the Baroque Period (3 credits)
- FAM 218 Music of the Classical Period (3 credits)
- FAM 219 19th-Century Music (3 credits)
- FAM 220 Art Music from 1900 to the Present (3 credits)

Music elective courses can be chosen from the following:

- FAM 123 World Music (3 credits)
- FAM 124 America's Music (3 credits)
- FAM 212 Canisius and the BPO Experience (3 credits)
- FAM 213 Women in Music (3 credits)
- FAM 214 Music in Film (3 credits)
- FAM 216 Medieval and Renaissance Music (3 credits)
- FAM 217 Music of the Baroque Period (3 credits)
- FAM 218 Music of the Classical Period (3 credits)
- FAM 219 19th-Century Music (3 credits)
- FAM 220 Art Music from 1900 to the Present (3 credits)
- FAM 221 Opera Workshop (3 credits)
- FAM 222 Opera Workshop II (3 credits)
- FAM 224 Afro-Centric Music (3 credits)
- FAM 255 Diction for Singers (3 credits)
- FAM 360 Music Business I (3 credits)
- FAM 361 Music Business II (3 credits)
- FAM 498 Internship (3 credits)
- DMA 309 Music Technology (3 credits)
- DMA 310 Digital Audio/Music Production (3 credits)
- HON 323 Opera (3 credits)
- HON 324 Symphony (3 credits)

PROGRAM OF STUDY
FINE ARTS

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
FAM 119	3	FAM 240/240L	4
FAM 230/230L	4	Music history course	3
FAM 226	2	FAM 226	2
Music ensemble	0-1	Music ensemble	0-1
Sophomore		Sophomore	
FAM 330/330L	4	FAM 340/340L	4
FAM 210	3	Music sequence course	3
FAM 226	2	FAM 226	2
Music ensemble	0-1	Music ensemble	0-1
Junior		Junior	
Music sequence course	3	Music sequence course	3
Music ensemble	0-1	Music ensemble	0-1
Senior		Senior	
FAM 450	3	Music ensemble	0-1
Music ensemble	0-1		

PROGRAM OF STUDY

FINE ARTS

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean. Some common dual majors with music are with communications, digital media arts, English, psychology, and education.

School of Education Major with a Music Concentration

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

Music Minor

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.

Two required courses:

FAM 115 Fundamentals of Music (3 credits)

(If the student has sufficient theory background as demonstrated by a placement test, another FAM theory course may be substituted for FAM 115.)

FAM 119 Masterpieces of Music (3 credits)

Students choose two of the following courses:

Course	Title	Credits
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 or FAM 222 Opera Workshop II	3
FAM 224	Afro-Centric Music	3

Students complete a total of six credits in the following courses:

Any combination of FAM courses, music ensembles, music lessons, DMA 309, DMA 310, HON 323, and HON 324.

Note: DMA 309 and DMA 310 are offered in alternate years.

PROGRAM OF STUDY FINE ARTS

MUSIC PERFORMANCE

Introduction

The requirements for the music performance sequence include extensive study of voice or an instrument with the performing faculty, many of whom are members of the Buffalo Philharmonic Orchestra. Students present two formal concerts to fulfill program requirements, one in the junior year and the other in the senior year (see below), in addition to regular participation in student recitals and ensembles. A more detailed description of the Music Program, faculty, facilities, academic and co-curricular opportunities can be found at <http://www.canisius.edu/music/index.dot>

Learning Goals and Objectives

Learning goals and objectives can be found at <http://www.canisius.edu/music/learning-goals-objectives/>

Qualifications

A vocal or instrumental performance audition is required prior to formal acceptance into the major, but students may begin to take courses before the audition takes place (usually no later than the end of the first academic year). In order to successfully complete the major, students must have a minimum grade of C- in each course included in the major. Students must maintain a 2.0 overall average to graduate with a degree in music. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All music majors should contact the Fine Arts Department Chair for advisement. The advisor will work closely with majors in discussing career expectations, choosing their major electives, developing their entire academic program, and planning their co-curricular or supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours. With the permission of the department chair, music majors may take an additional 8 credits of lessons and/or ensembles for free elective credit.

Major Requirements

Music majors complete required courses and electives, participate in ensemble for eight semesters, and perform junior and senior recitals.

Required Courses

Course	Title	Credits
FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230/230L	Music Theory I and Lab	4
FAM 240/240L	Music Theory II and Lab	4
FAM 330/330L	Music Theory III and Lab	4
FAM 340/340L	Music Theory IV and Lab	4
FAM 450	Senior Seminar	3
FAM 226	Music performance: eight semesters	16
FAM Music History Course Elective (choose one of the following)		
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

PROGRAM OF STUDY
FINE ARTS

Music Ensemble (0-8 credits)

Majors must take the same ensemble for all eight semesters.

A student may take a music ensemble for one (1) credit

- FAM 181 Chorale
- FAM 182 Jazz Ensemble
- FAM 184 Chamber Orchestra
- FAM 185 Concert Band

or for zero (0) credit

- FAM 171 Chorale
- FAM 172 Jazz Ensemble
- FAM 174 Chamber Orchestra
- FAM 175 Concert Band

Students may opt for zero credit to avoid exceeding 18 credits in a semester.

Music Elective

(choose one of the following)

Course	Title	Credits
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	3
FAM 222	Opera Workshop II	3
FAM 224	Afro-Centric Music	3
FAM 255	Diction for Singers	3
FAM 360	Music Business I	3
FAM 361	Music Business II	3
FAM 498	Internship	3
FAM 499	Independent Study in Music	3
DMA 309	Music Technology	3
DMA 310	Digital Audio/Music Production	3
HON 323	Opera	3
HON 324	Symphony	3

Major Experiences

Students in Music Performance present two recitals to complete the requirements for the degree: a junior year recital (25-30 minutes of music) and a senior recital (50-60 minutes with intermission).

PROGRAM OF STUDY
FINE ARTS

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
FAM 119	3	FAM 240/240L	4
FAM 230/230L	4	Music history course	3
FAM 226	2	FAM 226	2
Music ensemble	0-1	Music ensemble	0-1
Sophomore		Sophomore	
FAM 330/330L	4	FAM 340/340L	4
FAM 210	3	FAM 226	2
FAM 226	2	Music ensemble	0-1
Music ensemble	0-1		
Junior		Junior	
Music elective	3	FAM 226	2
FAM 226	2	Music ensemble	0-1
Music ensemble	0-1		
Senior		Senior	
FAM 226	2	FAM 226	2
FAM 450	3	Music ensemble	0-1
Music ensemble	0-1		

PROGRAM OF STUDY

FINE ARTS

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean. Some common dual majors with music are communications, digital media arts, English, psychology, and education.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

PROGRAM OF STUDY
FINE ARTS

MUSIC BUSINESS

Introduction

The music major with a music business concentration is an interdisciplinary opportunity for students to combine their passion for music with the marketing and business components of the music industry, all within the liberal arts tradition of the college. The concentration is a joint collaboration between the College of Arts and Sciences and the Wehle School of Business, combining the Bachelor of Arts degree music major and the business minor with the addition of select music business courses and a music business internship.

A more detailed description of the Music Program, faculty, facilities, academic and co-curricular opportunities can be found at <http://www.canisius.edu/music/index.dot>

For Learning Goals and Objectives

Learning goals and objectives can be found at <http://www.canisius.edu/music/learning-goals-objectives/>

Qualifications

A vocal or instrumental performance audition is required prior to formal acceptance into the major, but students may begin to take courses before the audition takes place (usually no later than the end of the first academic year). In order to successfully complete the major, students must have a minimum grade of C- in each course included in the major. Students must maintain a 2.0 overall average to graduate with a degree in music. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All music majors should contact the Fine Arts Department Chair for advisement. The advisor will work closely with majors in discussing career expectations, choosing their major electives, developing their entire academic program, and planning their co-curricular or supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours. With the permission of the chair, music majors may take an additional 8 credits of lessons and/or ensembles for free elective credit.

Major Requirements

Majors complete required music courses and electives, participate in ensemble for eight semesters, complete the required business concentration courses and elective, and participate in a music business internship.

PROGRAM OF STUDY
FINE ARTS

Required Courses

Course	Title	Credits
FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230/230L	Music Theory I and Lab	4
FAM 240/240L	Music Theory II and Lab	4
FAM 330/330L	Music Theory III and Lab	4
FAM 340/340L	Music Theory IV and Lab	4
FAM 360	Music Business I	3
FAM 361	Music Business II	3
FAM 450	Senior Seminar	3
FAM 498	Internship	3
FAM 226	Music performance: four semesters	8
FAM Music History Course Elective (choose one of the following)		
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
DMA Course Elective (choose one of the following)		
DMA 309	Music Technology	3
DMA 310	Digital Audio/Music Production	3

Note: DMA 309 and DMA 310 are offered in alternate years

Music Ensemble (0-8 credits)

Majors must take the same ensemble for all eight semesters.

A student may take a music ensemble for one (1) credit

- FAM 181 Chorale
- FAM 182 Jazz Ensemble
- FAM 184 Chamber Orchestra
- FAM 185 Concert Band

or for zero (0) credit

- FAM 171 Chorale
- FAM 172 Jazz Ensemble
- FAM 174 Chamber Orchestra
- FAM 175 Concert Band

Students may opt for zero credit to avoid exceeding 18 credits in a semester.

Required Business Courses

Course	Title	Credits
ECO 101	Principles of Macroeconomics	3
ACC 201	Financial Accounting	3
ECO 255	Business Stats I	3
MGT 101	Introduction to Management	3
MKT 201	Principles of Marketing	3
FIN 201	Business Finance	3

Business Elective

(choose one of the following)

Course	Title	Credits
ECO 102	Principles of Microeconomics	3
MGT 360	Organizational Behavior	3
MGT 364	Human Resources Management	3
MKT 320	Consumer Behavior	3
MKT 351	Sales Management	3
MKT 352	Professional Sales	3

PROGRAM OF STUDY
FINE ARTS

Major Experience

Internship (FAM 498): The program requires an internship with a business or organization related to the student's primary interest, which gives the student hands-on experience in the field. A variety of settings are possible including music or arts management, recording studios, radio stations, and music retailing. Prerequisites: FAM 360 and FAM 361 or permission of the department chair.

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
FAM 230/230L	4	FAM 119	3
FAM 226	2	FAM 240/240L	4
Music ensemble	0-1	FAM 226	2
ECO 101	3	Music ensemble	0-1
		MGT 101	3
Sophomore		Sophomore	
FAM 330/330L	4	FAM 340/340L	4
FAM 210	3	Music history course	3
FAM 226	2	FAM 226	2
Music ensemble	0-1	Music ensemble	0-1
ACC 201	3	MKT 201	3
Junior		Junior	
FAM 360	3	FAM 361	3
Music ensemble	0-1	Music ensemble	0-1
ECO 225	3	DMA 309 or 310 (see note below)	3
		FIN 201	3
Senior		Senior	
FAM 450	3	FAM 498	3
Music ensemble	0-1	Music ensemble	0-1
Business elective	3		

Note: DMA 309 and 310 are offered in alternate years.

PROGRAM OF STUDY

FINE ARTS

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean. Some common dual majors with music are communications, digital media arts, English, psychology, and education.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

2015 – 2017 MUSIC 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. (Field 3)

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. (Field 3, Global Awareness)

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. (Field 3, Global Awareness)

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. (Field 3, Diversity)

FAM 125 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. Please note that there is a fee for this course (see the course schedule).

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).

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.)

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)

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)

PROGRAM OF STUDY

FINE ARTS

- 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.)
- 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.)
- 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)
- 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)
- 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.)
- 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.
- 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 repertoire with Canisius College faculty, BPO conductors, soloists, and managers. (Field 3, Global Awareness, Oral Communication)
- 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. (Field 3, Diversity)
- 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. (Field 3)
- 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. (Field 3, Global Awareness)
- 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. (Field 3, Global Awareness)
- 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. (Field 3, Global Awareness)
- FAM 219 19th-Century Music** **3 credits**
Great composers of the Romantic period, including their lives, selected works, musical style, and influence. (Field 3, Global Awareness)
- 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. (Field 3)
- FAM 221 Opera Workshop** **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. (Field 3)

PROGRAM OF STUDY

FINE ARTS

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. (Field 3)

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. (Field 3, Global Awareness)

FAM 225 Music Performance **2 credits**

Hour-length private lessons designed for the experienced musician are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, chamber ensemble, and conducting. Please note that there is a fee for this course (see the course schedule).

FAM 226 Music Performance **2 credits**

Hour-length private lessons designed for the experienced musician are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, chamber ensemble, and conducting. For music majors, music minors, education majors with a music concentration, and music scholarship winners (no fee).

FAM 230 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. Prerequisite: FAM 115 or permission of instructor. Theory I Lab required. (Field 3) *Fall*

FAM 230L Theory I Lab **1 credit**

Weekly lab instruction in sight-singing and ear-training. Development of aural skills in melodic, harmonic, and rhythmic dictation. Course to be taken concurrently with FAM 230 Theory I. *Fall*

FAM 240 Theory II **3 credits**

A study of four-part composing as developed in Europe, particularly tonal music associated with Bach, Mozart, and Beethoven. Prerequisite: FAM 230 or permission of instructor. Theory II Lab required. (Field 3) *Spring*

FAM 240L Theory II Lab **1 credit**

Weekly lab instruction in sight-singing and ear-training. Development of aural skills in melodic, harmonic, and rhythmic dictation. Course to be taken concurrently with FAM 240 Theory II. *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.

FAM 255 Diction for Singers **3 credits**

The study of correct pronunciation for singing in English and foreign languages using the International Phonetic Alphabet.

FAM 330 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. Prerequisite: FAM 240. Theory III Lab required. *Fall*

FAM 330L Theory III Lab **1 credit**

Weekly lab instruction in sight-singing and ear-training. Development of aural skills in melodic, harmonic, and rhythmic dictation. Course to be taken concurrently with FAM 330 Theory III. *Fall*

FAM 340 Theory IV **3 credits**

Musical styles, forms, and techniques of the 20th century, including impressionism, atonality, serialism, minimalism, and electronic applications. Study of selected works by Debussy, Ravel, Stravinsky, Schoenberg, Messiaen, Boulez, Glass, and Varese. Prerequisite: FAM 330. Theory IV Lab required. *Spring*

FAM 340L Theory IV Lab **1 credit**

Advanced lab instruction in sight-singing and ear-training. Course to be taken concurrently with FAM 340 Theory IV. *Spring*

PROGRAM OF STUDY

FINE ARTS

FAM 350 Basic Conducting **3 credits**

Development of students' basic conducting skills of beat, pattern and gesture, leadership of musical activities, and musicianship including applied ear training and score analysis.

FAM 360 Music Business I **3 credits**

An overview of the many aspects of the music industry, including arts management, administration, promotion, marketing, financing through grant proposals, and legal issues as they apply to opportunities in a not-for-profit music business career.

FAM 361 Music Business II **3 credits**

Comprehensive discussion of artist management, promotion, marketing, contract negotiation, copyright and licensing laws, contract law and negotiation, media and public relations related to music business, and the role of agent/manager in the recording industry.

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. (Core Capstone)

FAM 450 Senior Seminar **3 credits**

An integration of the diverse areas of music into a coherent whole. Course includes supervised research culminating in a senior project. Prerequisite: Music majors or permission of the instructor. (Oral Communication)

FAM 498 Internship **3 credits**

Students taking music as a major or minor are matched in local professional settings including performing organizations and theaters. Prerequisite: Permission of the instructor and department chair.

FAM 499 Independent Study in Music **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. Prerequisite: Permission of the instructor, department chair, and associate dean.

PROGRAM OF STUDY FINE ARTS

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. A more detailed description of the program, faculty, facilities, academic, and co-curricular opportunities can be found at <http://www.canisius.edu/studio-art/index.dot>

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):

Three required courses: (9 credits)

FAS 110 Two-Dimensional Design

FAS 120 Drawing I

FAS 130 Three-Dimensional Design

Students choose three additional FAS courses: (9 credits)

Course	Title	Credits
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 161	Experimental Printmaking Techniques	3
FAS 162	Monotype Techniques	3
FAS 170	Painting I	3
FAS 220	Drawing II	3
FAS 222	Figure Drawing I	3
FAS 250	Studio Art Capstone	3
FAS 260	Printmaking II	3
FAS 270	Painting II	3
FAS 271	Landscape Painting	3
FAS 499	Independent Study in Studio Art	3

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.

The FAS 250 Studio Art Capstone course provides an opportunity for studio art minors to work with faculty who are practicing artists on the development of a final project or portfolio as a basis for further study in the visual arts.

For Learning Goals and Objectives

Learning goals and objectives can be found at <http://www.canisius.edu/studio-art/learning-goals/>

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.

2015 – 2017 STUDIO ART COURSES

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. (Field 3)

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. (Field 3)

PROGRAM OF STUDY

FINE ARTS

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. (Field 3)

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). (Field 3)

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. Prerequisite: 35mm camera with manual controls. (Field 3)

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. Prerequisites: No prior photo experience; students must have a D-SLR camera (digital single lens reflex camera). (Field 3)

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. (Field 3)

FAS 150 Color 3 credits

Combines in-depth color theory with design and composition making learned through traditional studio setups and contemporary computer applications. (Field 3)

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: Drawing I course or permission of instructor. (Field 3)

FAS 161 Experimental Printmaking Techniques 3 credits

Introduces students to the history of printmaking as an art form. Students will explore alternative methods of mark-making and hand-printing without the use of toxic chemicals, acids or presses. This process incorporates drawing and design skills while exploring color relationships via the intrinsic nature of printmaking. (Field 3)

FAS 162 Monotype Techniques 3 credits

Introduction to and concentration on monotype, a combination of printmaking and painting. This process utilizes drawing, painting, and design skills. Prerequisite: Drawing I course or permission of instructor. (Field 3)

FAS 170 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. (Field 3)

FAS 220 Drawing II 3 credits

Deals with conceptual and perceptual issues of representation. Emphasis is on finding a more personal and creative vision. Artwork, readings, gallery visits, critiques, and discussions included. Prerequisite: Drawing I course. (Field 3)

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 range of media. Students also work on independent, personal projects using figure. (Field 3)

FAS 231 Clay Studio 3 credits

Course emphasizes the basic process of clay modeling and mold making in plaster. Beginning with hand-built sculptural forms, students progress to realistic clay modeling that will be completed by making a mold and casting in plaster. (Field 3)

PROGRAM OF STUDY

FINE ARTS

FAS 240 Color Photography **3 credits**

Explores the basic concepts and techniques of color photography using both traditional silver-based media and the digital studio. Prerequisites: Intro Photo course or approval of instructor, digital or 35 mm camera with manual controls. (Field 3)

FAS 241 Intermediate Photography **3 credits**

In-depth study of advanced digital photographic workflow, including color management, visual interpretation of the digital negative, and the application of artificial light in the studio and field. Prerequisites: Intro Photo course or portfolio review with instructor; 35mm digital single lens reflex camera with manual controls. (Field 3)

FAS 250 Studio Art Capstone **3 credits**

Studio art minor will culminate in a final project devised by each student individually to be presented as a portfolio or gallery exhibit. Critique will be a major focus, through presentation and written evaluation of peer work. Students will develop a project of their own choice based on individual necessity and be largely self-directed. Prerequisites: must be a studio art minor nearing graduation; completion of FAS 110, FAS 120 and FAS 130; permission of instructor.

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: Printmaking I course. (Field 3)

FAS 270 Painting II **3 credits**

Students consider further technical and conceptual issues of representation and abstraction. Goal is a more personal and creative vision. Artwork, readings, gallery visits, critiques, and discussions included. Prerequisites: Two-Dimensional Design and Painting I courses. (Field 3)

FAS 271 Landscape Painting **3 credits**

Photo-based and open air painting will be the focus of this course. Students will also consider critical issues and trends in landscape painting and representation. Issues will include urban vs. natural scenes, panoramic and close-up composition-making, and imagined, abstracted, and perceptually observed subject matter. Prerequisite: Two-Dimensional Design, Drawing I, or Painting I course preferred. (Field 3)

FAS 322 Figure Drawing II **3 credits**

Further work with human figure as primary subject matter. Students work from model for half the semester. Review anatomical structures and continue with expressive use of figure in composition-making. Work in range of media. Students also work on independent, personal projects using figure. Prerequisite: Figure Drawing I course. (Field 3)

FAS 499 Independent Study in Studio Art **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. Prerequisites: Permission of the instructor, department chair, and associate dean.

PROGRAM OF STUDY HEALTH AND WELLNESS

HEALTH AND WELLNESS

Chair: Peter Koehneke
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.

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, chiropractic, physician's assistant, and for an exceptional few medical school.

Admission to these 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.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/health-wellness/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/health-wellness/learning-goals/>

Qualifications

Students must achieve a C or above in the following courses: BIO 114 and lab, BIO 115 and lab, ATH 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 Health and Wellness majors are assigned an advisor and should contact the Department of Kinesiology directly to have an advisor assigned if they do not already have one. 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.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

PROGRAM OF STUDY HEALTH AND WELLNESS

Major Courses

Course	Title	Credits
BIO 114/L	Human Biology: An Introduction to Anatomy and Physiology	4
BIO 115/L	Musculoskeletal Anatomy and Physiology	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/L	Physiology of Exercise and lab	4
HED 337	Exercise Principles	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

Major Electives

Health and Wellness majors should consult their advisor for major electives.

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

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.

PROGRAM OF STUDY
HEALTH AND WELLNESS

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
BIO 114 and Lab	4	BIO 115 and Lab	4
HED 115	3	KIN 170	3
FYS 101	3	ENG 101	3
Field 3 or 4	3	Field 3 or 4	3
Elective	3	Elective	3
Sophomore		Sophomore	
KIN 235	3	PHI 101	3
PSY 101	3	HED 205	3
RST 101	3	HED 425	3
HED 220	3	PSY 102	3
Elective	3	Elective	3
Junior		Junior	
KIN 336/L	4	HED 361	3
Field 1 or 2	3	ATH 398	3
Attribute	3	Field 1 or 2	3
Attribute	3	HED 337	3
Elective	3	Elective	3
Senior		Senior	
KIN 350	3	KIN 498	3
Elective	3	Core Capstone	3
Elective	3	Elective	3
Elective	3	Elective	3

PROGRAM OF STUDY HEALTH AND WELLNESS

Additional Course Considerations

Health and Wellness majors should consult their advisor for additional course considerations.

Dual Majors

Health and Wellness students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. The Health and Wellness major may be combined with another major, such as athletic training or marketing. A plan of study must be devised as early as possible with an academic advisor in the chosen majors.

Before Health and Wellness students declare dual majors, it is important to meet with their academic advisor. Some dual 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 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

Health and Wellness students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

The Strength and Conditioning minor is a common minor for health and wellness 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.

Strength and Conditioning Minor Courses

Course	Title	Credits
BIO 114	Human Biology (Lab)	4
BIO 115	Musculoskeletal Anatomy (Lab)	4
KIN 235	Kinesiology	3
KIN 336	Physiology of Exercise	3
HED 337	Exercise Principles	3
HED 115	Basic Nutrition	3
PED 365	Principles and Philosophy of Coaching	3
KIN 420	Strength and Conditioning Applications	3

Note: Dr. Karl Kozlowski and Dr. Chuck Pelitera serve as advisors for the Strength and Conditioning minor program in the Department of Kinesiology.

PROGRAM OF STUDY HEALTH AND WELLNESS

2015 – 2017 HEALTH AND WELLNESS COURSES

KIN 170 Emergency Care 3 credits

Recognition and immediate care of common illnesses and injuries. Content meets National Safety Council requirements for Standard First Aid and CPR. *Spring*

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: KIN 235 with a grade of C or above. *Fall/Spring*

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. *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. *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. *Fall/Spring*

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. Prerequisites: BIO 114/L and HED 205 with a grade of C or above. *Fall/Spring*

HED 361 Psychology of Sport and Mental Health 3 credits

Psychological aspects of healthy living related to sports, exercise and lifestyle. Stress and relaxation techniques, controlled breathing and holistic benefits of health are discussed, leading to an improved quality of life for athletes. Meets Field Knowledge V. *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. *Fall/Spring*

KIN 235 Kinesiology 3 credits

Scientific study of human movement, emphasizing the basic principles of musculoskeletal anatomy, neuromuscular physiology and biomechanics. Prerequisite: BIO 115 and lab with a grade of C or above. *Fall/Spring*

KIN 336 Physiology of Exercise 3 credits

Effects of physical activity upon the functioning human body. Restrictions on levels of physical activity by normal metabolic limitations. Lab required (KIN 336L) for Athletic Training majors. Prerequisite: BIO 115 and lab and KIN 235 with a minimum grade of C. *Fall/Spring*

PROGRAM OF STUDY
HEALTH AND WELLNESS

KIN 336L Physiology of Exercise Lab **1 credit**

Laboratory experiences in physiology of exercise. Lab required (HHP 336L) for Athletic Training and Health and Wellness majors. Prerequisite: Concurrent registration in KIN 336. *Fall/Spring*

KIN 350 Organization and Administration of Health and Wellness **3 credits**

Organization and administration of health and wellness programs. Basic theories and philosophies of administration, along with the duties, functions and processes as related to problems and practices in health and wellness facilities. *Fall*

KIN 498 Internship in Health and Wellness **6 credits**

Field-based experience in a health and wellness related field. Requires a minimum of 240 clock hours over fifteen weeks. Prerequisites: HED 115, HED 220, PSY 101, PSY 102, KIN 336/L, HED 337, and HED 425.; Instructor Signature, application. *Fall/Spring/Summer*

PROGRAM OF STUDY
HISTORY

HISTORY

Chair: David R. Devereux, 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 our website at <http://www.canisius.edu/history/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/history/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 overall average to graduate with a degree in history. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All history majors should have an advisor in the department and should contact the chair directly to have an advisor assigned if they do not already have one. Students 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 Requirements for the Major Core Curriculum:

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

The history major consists of twelve three-credit courses, which must include:

- At least one course focusing on the period before 1800
- At least two courses in American history
- At least two courses in European history
- At least two courses in the history of Africa, Asia, or Latin America

At least one course in each of the three areas must be at the 300 level

- A course designated "Historian's Craft" (HIS 299)
- A course designated as a major seminar

The thirty-six credit hours in history may not include more than 12 credit hours in 100-level courses, and must include 12 credit hours in 300-level courses. Ideally, students will satisfy the "Historian's Craft" requirement before the end of the sophomore year.

PROGRAM OF STUDY

HISTORY

Major Electives

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.

Major Experiences

The history department offers a departmental honors program consisting of two advanced seminars: HIS 401 Historical Methodology and HIS 411 Senior Honors. These courses are designed to develop the research, writing, and analytical skills necessary for graduate and professional school. Students who complete HIS 401, HIS 411 and HIS 400 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.

Dual Majors

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

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.

PROGRAM OF STUDY

HISTORY

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.

2015 – 2017 HISTORY COURSES

CLS 103 Greek History **3 credits**

CLS 104 Roman History **3 credits**

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. (Field 4, Global attribute) *Fall and/or Spring*

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. (Field 4, Global attribute) *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. (Field 4 Global Awareness Attribute) *Fall and/or Spring*

PSC 111 Western Political Tradition II **3 credits**

HIS 109 History of Asia to 1800 **3 credits**

Comparative study of civilizations, cultures, religions and institutions of the Far East, and South Asia. (Field 4, Global attribute) *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. (Field 4, Global Awareness Attribute) *Spring*

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 (Field 4, Diversity Attribute) *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. Not open to students taking or who have received credit for HIS 126 (Field 4, Diversity Attribute) *Fall and/or Spring*

HIS 125 America's Story I: The Early Years **3 credits**

This course introduces the major events, figures and themes of American history from the Colonial period to Reconstruction with an emphasis on discussion and presentation of material. Not open to students taking or who have received credit for HIS 123. (Field 4, Diversity attribute, Oral Communication)

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. Not open to students taking or who have received credit for HIS 124 (Field 4, Diversity and Oral Communication Attributes)

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. (Field 4, Global Attribute) *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 (Field 4, Global Awareness Attribute) *Spring*

PROGRAM OF STUDY

HISTORY

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 (Field 4, Justice Attribute)

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. (Field 4)

CLG 208 Greek Historians: Sources for Athenian History 3 credits

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. (Field 4, Global Awareness Attribute)

HIS 212 Men and Ideas in History 3 credits

Role of ideas in historical change. Relationship between the ideas of a particular period and the social, political and economic forces that helped to shape them (Field 4)

HIS 213 Twentieth Century Europe 3 credits

Major political, economic, social and intellectual currents in Europe since 1900. (Field 4, Global attribute) *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." (Field 4)

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. (Field 4, Global attribute).

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. (Field 4)

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. (Field 4, Global attribute) *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. (Field 4, Diversity Attribute)

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. (Field 4, Diversity Attribute)

HIS 237 The Making of Modern America 1865-1920 3 credits

This course offers a survey of the major themes of one of the most dynamic periods in American History. Among the topics covered are Reconstruction, urbanization, industrialization, mass migration, the closing of the western frontier, Progressive Reform and the Great War and its aftermath. We will interrogate a variety of written and visual sources to better understand the major conflicts of the period and how they were resolved. (Field 4, Diversity Attribute)

PROGRAM OF STUDY

HISTORY

HIS 241 Women in American History, 1880 to the Present **3 credits**

This course explores the historical experiences of American women between 1880 and the present with attention to how the intersections of class, race, ethnicity, and sexuality affected women's public and private lives. Special attention is paid to the themes of work, politics, citizenship and domestic life. (Field 4, Diversity Attribute)

HIS 251 Sports 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. (Field 4)

HIS 254 First Peoples **3 credits**

The story of the first peoples of the Americas from their initial appearance 20,000 years ago down to the present, with a special emphasis on native North America. Includes a survey of the histories and cultures of the indigenous peoples of the Americas. (Field 4, Diversity Attribute)

History 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 (Field 4)

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. (Field 4, Global Awareness Attribute)

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. (Field 4, Global Awareness Attribute)

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. (Writing Intensive Attribute)

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.

CLS 300 Roman Law and Society **3 credits**

CLS 301 The Age of Cicero **3 credits**

CLS 308 Pagans and Christians **3 credits**

CLS 311 Alexander the Great **3 credits**

CLS 312 The Greek Enlightenment **3 credits**

HIS 302 A Life in the Colonial Atlantic World **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. (Field 1)

HIS 306 The 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. (Field 1)

CLG 308 Readings in Greek History: Sources for Athenian History **3 credits**

RST 325 Early Christianity **3 credits**

RST 327 Modern Global Christianity **3 credits**

PROGRAM OF STUDY

HISTORY

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.

HIS 331 Britain's 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. (Oral Communication Attribute)

HIS 334 Britain in the Age of Victoria

3 credits

Social and political history of 19th-century Britain. Topics include the transition from rural to urban society, the evolution from aristocratic to democratic politics, and the emergence of characteristically 'Victorian' social and cultural patterns.

HIS 338 Britain's Empire

3 credits

The growth and character of the British Empire from 17th century through the 20th. Emphasis on social, cultural and political impact of colonization and decolonization in such regions as India, Africa, the Caribbean and Australia.

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.

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.

HIS 345 The Soviet Union and After

3 credits

This course examines the history of the Cold War between 1945 and 1991. It focuses on the attempts of the Soviet Union and the United States to extend their influence and models of development into Asia, Africa, Latin America, and Europe through armed interventions, covert operations, espionage, and propaganda.

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.

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. (Field 2, Justice Attribute)

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. (Field 2, Ethics Awareness Attribute)

HIS 356 Twentieth Century 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.

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.

HIS 359 History of Japan: 1868 – Present

3 credits

Development of modern Japan from Restoration of 1868 to the present.

HIS 364 Technology in America

3 credits

Exploring the history of technology in the United States from the nineteenth century until the rise of the popular Internet, this course examines technology development and use in the context of politics, culture, and social justice. (Justice Attribute)

PROGRAM OF STUDY

HISTORY

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.

HIS 370 Murder & Madness in Modern America **3 credits**

Focuses on American murder cases and episodes of madness since 1900, including assassinations, ideological killings, serial killings, spree killings, contract murders, and garden variety household murders. Also looks at how murderers have been punished and how murder stories have entertained American society.

HIS 372 American Revolution **3 credits**

Exploration of the political, social and constitutional issues in the era of American Independence. In particular we will try to answer the question, "Was the American Revolution truly revolutionary?"

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. (Justice Attribute)

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.

HIS 387 Representations of the Holocaust in Film and 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. (Field 3, Ethics Attribute)

HIS 390 Civil Rights Movement **3 credits**

Examines the African-American movement to end racial injustice. Focus is on dramatic events since World War II, black leaders and organizations, white allies, the Ku Klux Klan, and the federal government's response. The far-reaching impact and the legacy of the movement will be considered. (Justice Attribute)

HIS 394 Contemporary 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.

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.

HIS 399 U.S. Foreign Relations since 1898 **3 credits**

The rise of the United States as a world power since the Spanish-American War of 1898. The struggle against Germany in Europe. The Cold War against the Soviet Union and Communist China. U.S. military interventions and CIA operations in Latin America, Asia, and the Middle East.

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: History honors students and others with permission of chair.

HIS 411 Seniors Honors Thesis **3 credits**

Research and writing of a thesis to satisfy requirements for graduation with Honors in History. Prerequisite: Consent of the instructor and/or permission of the chair. (Writing Intensive Attribute) *Fall*

HIS 400 Level Seminar **3 credits**

Each year the department will offer a seminar which is the final required course for the completion of the History major and the History honors sequence. Course number and topic will vary according to the professor. Topics taught in the past include War and Genocide in the 20th century, U.S. National Security and Soccer in Global History.

PROGRAM OF STUDY

HISTORY

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. (Core Capstone)

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. (Core Capstone)

HIS 460 The Life and Times of Theodore Roosevelt **3 credits**

Explores the decades popularly known as the Gilded Age and Progressive Era with special attention to Theodore Roosevelt, what he famously called "the strenuous life," and his efforts towards the achievement of a more just economic and social order. (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. Prerequisite: Consent of the instructor and permission of the chair and 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. Prerequisite: Consent of instructor and permission of chair and associate dean.

PROGRAM OF STUDY
HUMANITIES

HUMANITIES

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.

Advisement

Canisius students are advised by an Associate Dean in the College of Arts and Sciences. Students interested in the major or Associate degree should contact their Associate Dean to set up an advising appointment or to discuss any questions. 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 must maintain an overall 2.0 cumulative average to graduate with a degree from Canisius.

**Humanities Curriculum (Bachelor of Arts Degree)
 Core Curriculum Requirements**

All students complete Core Curriculum requirements as part of their overall Canisius Education. These requirements can be found at <http://www.canisius.edu/academics/core>

Major course requirements (19 courses)

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
<i>Concentration</i> Three additional 300/400-level courses in one of the following departments: Fine Arts, English, History, Modern Language, Religious Studies, Philosophy

Free electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Associate of Arts Degree

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); 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 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.

PROGRAM OF STUDY

HUMANITIES

Humanities 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: <http://www.canisius.edu/academics/core>

Major Course Requirements

(6 courses)

<i>Humanities Track: (6 courses)</i>
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 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 registrar.

For more information contact the dean in the College of Arts and Sciences.

PROGRAM OF STUDY
HUMAN SERVICES

HUMAN SERVICES

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 three tracks: Early Childhood Intervention; Schools and Community; and Child, Youth and Family Development. Please see the department's website at <http://www.canisius.edu/human-services/> for a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities.

Learning Goals and Objectives

For Learning Goals and Objectives please go to:

<http://www.canisius.edu/human-services/learning-goals-and-objectives>

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 will be assigned a Human Services advisor and will work closely with their advisor. Periodic advisement meetings will be scheduled to discuss such things as program overview, course sequencing and scheduling, supervised internship assignments, career planning and other supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students must complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY
HUMAN SERVICES

Human Services Major

All Human Services Majors:

Course	Title	Credits
HSV 200	Introduction to Human Services	3
HSV 201	Introduction to Family Dynamics	3
COM 204	Interpersonal Communication	3
EDE 100	Human Growth & Development – Birth through Childhood or	3
EDS 101	Human Growth & Social Development: Adolescence	3
HSV 300	Social and Cultural Diversity	3
HSV 301	Social Policies in Education	3
EDU 250	Foundations of Education	3
HSV 302	Children, Schools, and the Community	3
HSV 400	Management of Human Service Agencies	3
HSV 450	Research in Human Services	3
HSV 495	Field Internship	3
HSV 480	Wellness – Be All That You Can Be (Core Capstone)	3
Electives	4 major electives from tracks listed on next column	12

Major Electives

In addition to the required courses, you need to choose one of three tracks: early childhood intervention and education; schools and community; or child, youth and family development. Each track requires the completion of four (4) electives in that specific area. Exceptions can be made in consultation with the program director.

Course	Title	Credits
Early Childhood Intervention and Education		
HSV 220	Introduction to Early Intervention	3
HSV 230	Risk and Resiliency in Early Childhood	3
SPE 100	Introduction to Special Education	3
EDY 209	Developmentally Appropriate Practices in the EC Classroom	3
EDY 208	Infant Toddler Care and Education	3
Schools and Community		
EDU 122	Technology in Education	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
EMC 352	Human Growth and Development Middle Childhood	3
EDE 311	Science in the Schools	3
EDE 317	Teaching Math in Elementary Schools	3
SPE 341	Inclusive Strategies	3
ECCH 412	Managing the Early Childhood and Elementary Classroom	3
EDS 360	Evaluation of Teaching Strategies	3
EDS 402 – 406	Methods of Teaching (Content Areas)	3
PSY 334	Child, Family, and Community Psychology	3
Child, Youth, and Family Development		
EMC 352	Human Growth and Development Middle Childhood	3
PSY 384	Child Psychology	3
PSY 307	Adolescence Psychology	3
CRJ 337	Violence and the Family	3
CRJ 354	Juvenile Delinquency	3
COM 205	Mass Communication and Society	3
COM 304	Family Communication	3

PROGRAM OF STUDY
HUMAN SERVICES

Major Experiences

Example: 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.

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
HSV 200	3	HSV 201	3
Sophomore		Sophomore	
EDE 100 EDU 250 COM 204	3 3 3	HSV 300	3
Junior		Junior	
HSV 301 HSV 450 Major Elective Major Elective	3 3 3 3	HSV 302 HSV 498 (Elective) Major Elective	3 3 3
Senior		Senior	
HSV 480 (Capstone) HSV 400 Major Elective	3 3 3	HSV 495	6

PROGRAM OF STUDY HUMAN SERVICES

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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. 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.

2015 – 2017 HUMAN SERVICES COURSES

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.

EDE 100 Human Growth & 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.

EDS 101 Human Growth & 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.

EDU 250 Foundations of Education 3 credits

This course introduces the historical, sociological, philosophical, and organizational foundations of education in the United States. Topics include a broad overview of teaching as a profession, an understanding of the role of education in a democratic society, diversity and social justice, home/school/community relationships, educational reform and other current issues in education.

HSV 200 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.

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 300 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.

HSV 301 Social Policies in Education 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.

PROGRAM OF STUDY

HUMAN SERVICES

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 400 Management of Human Service Programs 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. The more specific purposes of the course are listed below.

HSV 450 Research in Human Services 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. Course materials will be available through Desire 2 Learn.

HSV 480 Wellness — Be All That You Can Be (Core Capstone) 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?

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 (Elective) 3 credits

Student experientially learns human service functions in compatibly matched professional setting. Faculty and on-site supervision. Pass/fail. Prerequisite: Open to junior and senior majors with GPA of at least 2.50 and Human Services average of 2.70 and approved by department faculty. Applications on Department website.

PROGRAM OF STUDY INTERNATIONAL BUSINESS

INTERNATIONAL BUSINESS PROGRAMS

Director: Coral Snodgrass, PhD

Introduction

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/international-business/index.dot>

Goals

For learning goals and objectives please go to <http://www.canisius.edu/international-business/learning-goals-objectives/>

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. 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 will also work with their advisor, the Program Director and the Assistant Dean in designing their study abroad experience and transferring the courses back to Canisius. Revisions to the required course schedule will be made accordingly.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

Course	Title	Credits
IBUS 301	Fundamentals of International Business	3
FIN 460	International Finance or ECO 460 International Trade	3
MGT 472	Comparative Management Systems	3
MKT 475	International Marketing	3

Major Electives

Three additional approved International Business electives are required.

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.

Additional Course Considerations

Language Requirement: all students are required to complete a modern language sequence through the 216 level. It is not necessary that this language be the one spoken in the country in which the student studies abroad.

PROGRAM OF STUDY
INTERNATIONAL BUSINESS

Common body of business knowledge:
MAT 105 Linear Algebra and MAT 106 Calculus for the Non-Sciences or MAT 115 Calculus for Business I
ACC 201 Financial Accounting
ACC 202 Managerial Accounting
ECO 101 Principles of Macroeconomics
ECO 102 Principles of Microeconomics
ECO 255 Business Statistics I
ECO 256 Business Statistics II
FIN 201 Introduction to Finance
ISB 101 Management Technology
MGT 101 Introduction to Management
MGT 325 Operations Analysis
MGT 370 Managerial Environment
MGT 446 Managerial Policy Strategy
MKT 201 Principles of Marketing
International Business majors:
IBUS 301 Fundamentals of International Business
MGT 472 Comparative Management Systems
MKT 475 International Marketing
FIN 460 International Finance or ECO 460 International Trade
International Business Electives (3 courses)
Electives (2 or 3 courses)
Restricted Electives (must be liberal arts) 4 courses

PROGRAM OF STUDY
INTERNATIONAL BUSINESS

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
FYS 101 MAT 105 or MAT 115 or MAT 111 RST 101 ECO 101 MACRO (Social Sciences Field) Modern Language 215		ENG 101 MAT 106 or A&S elective if MAT 111 115/111 PHI 101 ECO 102 MICRO Modern Language 216	
Sophomore		Sophomore	
MKT 201 ACC 201 Field of Knowledge 4 - History ECO 255 STATS 1 (Mathematics Field) ISB 101		FIN 201 ACC 202 Field of Knowledge 3 - Arts ECO 256 STATS 2 MGT 101	
Junior		Junior	
IBUS 301 MGT 325 Fin 460 or ECO 460 Field of Knowledge 6 - Science Field of Knowledge 1 - Religion		MGT 472 MKT 475 IBUS ELECTIVE Field of Knowledge 2 - Philosophy A&S Elective	
Senior		Senior	
MGT 370 IBUS Elective Free Elective Core Capstone A&S Elective		MGT 446 IBUS Elective Free Elective A&S Elective A&S Elective	

PROGRAM OF STUDY INTERNATIONAL BUSINESS

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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 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 the appropriate associate dean.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

2015 – 2017 IBUS CORE 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.

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, and cultural analysis. Different management and business practices. Managing and doing business within and across many countries. Prerequisites: MGT 101 or permission of Instructor.

MKT 475 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. Prerequisites: MKT 201 or permission of Instructor.

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.

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. Prerequisites: ECO 101-102.

Approved IBUS Electives include the following:

IBUS 496 International Business Internship 3 credits

Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean.

IBUS 499 International Business Independent Study 3 credits

Student must complete an Independent Study Application Form and obtain the approval of a faculty supervisor, department chair and the associate dean.

Additional International Business Electives

The following courses, offered by other programs in the business school, can be counted as International Business electives. Course descriptions for these courses are listed elsewhere in the catalog.

MGT 474 (MKT 474) Doing Business in Canada 3 credits

MGT 475 Doing Business in Latin America 3 credits

MGT 440 Global Supply Chain Management 3 credits

MKT 478 Global Logistics 3 credits

ENT 312 International Entrepreneurship 3 credits

MGT 380 International Business Seminar 3 credits

ECO 460 International Trade 3 credits

PROGRAM OF STUDY
INTERNATIONAL RELATIONS

INTERNATIONAL RELATIONS

Director: Jonathan DiCicco, PhD

Introduction

The International Relations program at Canisius College is a multidisciplinary program that is anchored in the Departments of 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 <http://www.canisius.edu/international-rel/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/international-rel/learning-goals-objectives/>

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

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.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

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 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. Major course requirements: (minimum 17 courses)

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INTERNATIONAL RELATIONS

Major Courses

Course	Title	Credits
	Choose one of the three regional history course groupings	6
Group 1		
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
Group 2		
HIS 109	History of Asia to 1800	3
HIS 110	History of Asia since 1800	3
Group 3		
HIS 131	Latin American History to 1800	3
HIS 132	Latin American History since 1800	3
ECO 101	Principles of Macroeconomics	3
PSC 140	Introduction to International Relations	3
PSC 150	Introduction to Comparative Politics and Government	3
HIS 300	Historical Geography	3
HIS 399	History of U.S. Foreign Relations or	3
PSC 245	American Foreign Policy	3
PSC 442	Seminar in International Relations	3
	Business: one 300 or 400-level international business course	3

Major electives: seven courses chosen from approved list in Economics, Finance, History, International Business, Modern Languages, Political Science, Philosophy, and Religious Studies. (21 credits)

Modern language training through the Intermediate-High level: successful completion of ML 215-216/217 (6 credits) and a 300-level course in a Modern Foreign Language (3 credits)

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.

Major Electives:
All International Relations majors must take seven Major Electives in addition to a 300 or 400-level course in a modern foreign language. Courses that have been approved as International Relations Major Electives are:

PROGRAM OF STUDY
INTERNATIONAL RELATIONS

2015 – 2017 Courses

Course	Title	Credits
ECO 460	International Trade	3
ENT 312	International Entrepreneurship	3
FIN 460	International Finance	3
HIS 213	20th-Century Europe	3
HIS 229	The Violent Century in Films	3
HIS 230	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 338	Britain's Empire	3
HIS 339	Nazi Germany, World War II, and the Holocaust	3
HIS 342	The Global Cold War	3
HIS 345	20th-Century Russia	3
HIS 346	Age of European Fascism, 1919-45	3
HIS 347	History of Marxism	3
HIS 348	20th-Century Marxism	3
HIS 356	20th-Century China	3
HIS 359	History of Modern Japan 1868 to the Present	3
HIS 365	U.S.-Latin American Relations since 1898	3
HIS 394	Contemporary Middle East	3
HIS 399	History of U.S. Foreign Relations	3
HON 231	War and Peace After 9/11	3
HON 247	Islam: Religion, History and Culture	3
IBUS 301	Fundamentals of International Business	3
MGT 380	International Business Seminar	3
MGT 440	Global Supply Chain Management	3
MGT 472	Comparative Management Systems	3
MGT 475	Doing Business in Latin America	3
MKT 474	Doing Business in Canada	3
MKT 475	International Marketing	3
MKT 478	Global Logistics and Transportation	3

PHI 262	Philosophy of International Law	3
PSC 241	Human Rights and Globalization	3
PSC 242	International Organizations	3
PSC 244	War: Causes and Consequences	3
PSC 245	American Foreign Policy	3
PSC 250	Politics in Latin America	3
PSC 343	Aid and Development	3
PSC 345	Transnational Crime after 9/11	3
PSC 346	National Security Council	3
PSC 355	European Union	3
PSC 360	Political Economy of the Developing World	3
PSC 370	Domestic Conflicts and Peace	3
PSC 445	Seminar in European Politics	3
PSC 452	Politics of Identity in Europe	3

Major International Experiences

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. Canisius students may study at the following institutions under articulation agreements that have been approved by Canisius College and the host university abroad: the University of the Sunshine Coast, Queensland, Australia; the University of Antwerp in Belgium; Pontifical Catholic University of Rio de Janeiro and the Universidad Federal Do Rio Grande do Sul (UFRGS) in Porto Alegre, Brazil; La Casa in San Salvador, El Salvador; the Catholic University of Lille, the IÉSEG School of Management of Lille and Paris, and the Ecole de Management of Strasbourg in France; the University of Dortmund, the Catholic University of Eichstaett, and the Berlin School of Economics and Law in Germany; the National University of Ireland in Galway; Lorenzo de' Medici in Florence and Rome in Italy; Sophia University in Tokyo, Japan; the Universidad del Pacifico in Lima, Peru; the

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INTERNATIONAL RELATIONS

University of Oviedo, the Universidad Pontificia Comillas in Madrid, and the Institut Químic de Sarrià (IQS) of Barcelona in Spain; Sogang University in Seoul, South Korea; and London Metropolitan University in the United Kingdom. Students may also study at an accredited university abroad other than those listed above. 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 (Québec), 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 <http://www.canisius.edu/international-rel/program/>

PROGRAM OF STUDY
INTERNATIONAL RELATIONS

Recommended Semester Schedule for Major Course Requirements

Fall	Spring
Freshman	Freshman
PSC 140 HIS 107 or HIS 109 or HIS 131 Modern Language at appropriate level ECO 101	PSC 150 HIS 108 or HIS 110 or HIS 132 Modern Language at appropriate level
Sophomore	Sophomore
PHI 101 Modern Language 300-level HIS 399 or PSC 245 IR Major Elective	IR Major Elective IR Major Elective
Junior	Junior
HIS 300 IR Major Elective IR Major Elective or 300-400 level Business	IR Major Elective IR Major Elective or 300-400 level Business
Senior	Senior

PROGRAM OF STUDY INTERNATIONAL RELATIONS

Dual Majors

Double majors have been developed between the International Relations Program and the Departments of History, Modern Languages, and Political Science as well as with the programs in European Studies and International Business. It is also possible to pursue a double major with other academic programs such as Communication Studies, Criminal Justice, Economics, Latin American Studies, 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

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. A student pursuing a minor in International Relations must also demonstrate intermediate competence in a modern foreign language. Generally this proficiency is demonstrated by successful completion of ML 215.

Major Courses needed for IR Minor

Course	Title	Credits
	Choose one of the three regional history course groupings	6
Group 1		
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
Group 2		
HIS 109	History of Asia to 1800	3
HIS 110	History of Asia since 1800	3
Group 3		
HIS 131	Latin American History to 1830	3
HIS 132	Latin American History since 1830	3
ECO 101	Principles of Macroeconomics	3
PSC 140	Introduction to International Relations	3
PSC 150	Introduction to Comparative Politics and Government	3
HIS 300	Historical Geography	3

Minor electives: three courses chosen from approved list in economics, finance, history, international business, modern languages, political science, and religious studies (9 credits)

Course in International Business (3 credits)

Note: World Cultures Courses

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. Courses recommended for this purpose are:

PROGRAM OF STUDY
INTERNATIONAL RELATIONS

2015 – 2017 World Culture Courses

Course	Title	Credits
FRC 433	Survey of French and Francophone Literature I	3
FRC 434	Survey of French and Francophone Literature II	3
FRC 437	Francophone History and Culture in Film I	3
FRC 439	Francophone History and Culture in Film II	3
FRC 449	Nos Voisins du Nord: Exploring the Francophone Regions of Canada	3
FRC 451	French Seminar and Special Topics	3
FRC 452	Tour de l'Amérique du Nord: Following the French in North America	3
FRC 453	War and Memory	3
FRC 454	Héritages Francophones	3
GER 441	The Young Generation and Civil Courage - 1848 to today	3
GER 443	Pioneers, Paragons, and Visionaries	3
GER 445	German Customs and Traditions	3
GER 451	Nobel Laureates for Literature	3
GER 453	German Literature after 1945	3
GER 455	The Weimar Republic: Culture and Literature	3
GER 457	German Theater - From its Beginnings to Today	3
GER 462	Germany Today	3
GER 463	1989 - The Fall of the Berlin Wall in the European Context	3
GER 465	1968 in the European Context	3
GER 467	Germany since 1871 - Political System and Form of Government	3
GER 472	Contemporary German Film	3
GER 473	German Literature and Film	3
GER 475	The History of German Film since Weimar	3
GER 478	Jewish Philosophers of German Ancestry	3

GER 480	The Life of the Mind	3
HIS 226	History of Ireland	3
HIS 331	The British Monarchy	3
HIS 358	Traditional Japan	3
HIS 387	Representations of the Holocaust in Literature, Film, Music, and Art	3
HON 219	African Ethics & Christianity	3
HON 248	Religions of the East	3
HON 357	Global Pentecostalism	3
HON 377	Plantation Psychosis: The Plantation in World Literature	3
HON 378	Magic Realism	3
PHI 271	Philosophy of Human Rights	3
RST 220	Introduction to Eastern Religions	3
RST 222	African Religions	3
RST 224	Islam: Tradition and Revival	3
RST 327	Modern Global Christianity	3
SPA 405	Spanish Literary Myths: Don Quixote, Don Juan, and Carmen	3
SPA 420	Spanish Contemporary Essay	3
SPA 433	La Telenovela: The Soap Opera in Latin America	3
SPA 436	Detective Fiction: Murderous Seduction	3
SPA 453	Who's Afraid of Franco? Almodóvar and La Movida: The Films of Pedro Almodóvar and After	3
SPA 455	Spanish Short Fiction	3
SPA 456	Cuban Cinema of the Revolution (in Cuba/Study Abroad)	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
SPA 463	Magic Realism: Latin America and the Boom	3

PROGRAM OF STUDY
JOURNALISM

JOURNALISM

Director: S. Catherine Foster, PhD

Introduction

The Communication Studies Department'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 on the journalism major please go to <http://www.canisius.edu/journalism/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/journalism/learning-goals-objectives/>

Qualifications

Journalism majors must have a cumulative GPA of at least 2.0, a minimum grade of C- in all 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 dual majors).

Advisement

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 Studies office at 888-2115 to be assigned an advisor. Each student should have an advisor and meet with him or her regularly. Canisius College requires all students to meet with their advisors to obtain an alternate PIN number that allows the student to register for courses.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

Course	Title	Credits
Seven journalism courses are required:		
JRN 100	Introduction to Journalism	3
JRN 200	Multimedia Storytelling	3
COM 203	Writing for the Public Media (Writing Intensive Attribute)	3
JRN 301	News Gathering/Reporting I	3
JRN 310	Journalism I	3
COM 351	Media Ethics (Ethics Attribute) or DMA 216 Digital Media Law	3
JRN 490	Senior Project and Portfolio	3

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:

PROGRAM OF STUDY
JOURNALISM

Sports Journalism and Broadcasting, required courses:

Course	Title	Credits
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 from:		
COM 359	Communication and Sports	3
SPMT 430	Sports Communications	3
SPMT 412	Sports Marketing	3
Sports Broadcast and Journalism – Select one from:		
JRN 201	Advanced Multimedia Storytelling	3
JRN 311	Advanced Journalism/Newsroom	3
JRN 322	Feature/Magazine Writing	3
COM 361	Introduction to TV Production	3
COM 367	Broadcasting in America	3

Narrative Journalism, required courses:

Course	Title	Credits
JRN 311	Advanced Journalism/Newsroom	3
JRN 322	Feature/Magazine Writing	3
JRN 342	Narrative Journalism	3
Concentration electives, select two (6 credit hours) from:		
ENG 294	Creative Writing	3
JRN 369	Television Features	3
JRN 201	Advanced Multimedia Storytelling	3
ENG 496	Advanced Creative Writing (Memoir)	3
COM 374	Film History	3

Multimedia Journalism, required courses:

Course	Title	Credits
JRN 201	Advanced Multimedia Storytelling	3
DMA 342	Introduction to Web Design or	3
CSC 108	Introduction to Web Computing	3
COM 361	Introduction to TV Production	3
Concentration electives, select two (6 credit hours) from:		
DMA 218	Motion Graphics	3
DMA 212	2D Graphics	3
JRN 322	Feature/Magazine Writing	3
JRN 369	Television Features	3
JRN 311	Advanced Journalism/Newsroom	3
COM 367	Broadcasting in America	3

Internships and Independent Study

Internships (JRN 488, JRN 498), awarding up to a maximum of 12 credit hours, may be earned by qualified journalism majors at approved Buffalo or other locations. 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.

Independent Study (JRN 499) provides the opportunity for a student to work under the supervision of a faculty member to complete an academic research project culminating in a scholarly product or news and feature stories, construction of a news web site, etc. The opportunity for independent study (three credits) is open only to junior or senior majors in good standing, with consent of the instructor and chair. Independent study, it should be noted, is granted only in very specific circumstances. Please see the department chair for more information.

PROGRAM OF STUDY
JOURNALISM

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
JRN 100	3	JRN 301	3
COM 203	3	JRN 200	3
Sophomore		Sophomore	
JRN 310	3	COM 351 or DMA 216	3
Junior		Junior	
Concentration requirement or elective	3	Concentration requirement or elective	3
Concentration requirement or elective	3	Concentration requirement or elective	3
Senior		Senior	
Concentration requirement or elective	3	JRN 490	3

PROGRAM OF STUDY

JOURNALISM

Dual Majors

Dual majors with journalism are available with the permission and guidance of both chairs. 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 dual 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.

Journalism students who are dual majors and successfully complete 3 or more credit hours in Independent Study or Internships (JRN 488, JRN 498 or JRN 499) are required to complete 30 hours of in-class credit in order to complete the journalism major.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

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.

2015 – 2017 JOURNALISM COURSES

JRN 100 Intro to Journalism **3 credits**
Introduces the history of journalism, its norms and best practices.

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.

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. Prerequisites: JRN 200 or permission of instructor.

JRN 301 News Gathering/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.

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). Prerequisites: JRN 100 or permission of instructor.

JRN 311 Advanced Journalism/Newsroom **3 credits**
Advanced study and practice of all aspects of journalism, including news gathering, reporting, writing and editing.

JRN 322 Feature/Magazine Writing **3 credits**
Profiles and other human-interest features developed for newspapers, magazines, broadcast. Free-lance writing is introduced.

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. COM elective.

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.

PROGRAM OF STUDY

JOURNALISM

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.

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.

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.

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.

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 or as part of a reporting/writing/editing team to produce a publishable multimedia community journalism project.

There are a number of courses from other disciplines that also count as Journalism electives:

COM 325 Media Literacy **3 credits**

COM 361 Introduction to Television Production **3 credits**

COM 491/492/493/494 Video Institute I, II, III, IV
3 credits

DMA 212 2D Digital Graphics **3 credits**

DMA 218 Motion Graphics **3 credits**

DMA 342 Introduction to Web Design **3 credits**

DMA 363 Print Design **3 credits**

DMA 370 Designing for Mobile Devices **3 credits**

DMA 442 Advanced Web Design **3 credits**

FAS 141 Digital Photography **3 credits**

ENG 294 Introduction to Creative Writing **3 credits**

ENG 496 Advanced Creative Writing: Memoir **3 credits**

PROGRAM OF STUDY
LATIN AMERICAN STUDIES

LATIN AMERICAN STUDIES

Director: Paola Fajardo-Heyward, PhD

Introduction

The Latin American Studies Program (LAS) is a multi-disciplinary program that students will adopt as a second or third major. Its primary focus is to promote intellectual discussion, teaching and research on Latin America and the Caribbean. The program also includes the study of Latinos in the United States. Moreover, LAS engages in a wide array of community outreach activities and programming, such as colloquia, K-12 collaboration, student conferences, and visits by renowned speakers. This complements the program's academic offerings and provides students, faculty and the local community with timely and relevant opportunities to learn about and become actively involved in issues relevant to Latin American Studies. LAS also serves to provide career opportunities for students interested in this geographical region and helps to establish stronger linkages with the Latin American and Latino communities in Western New York. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/latin-american>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/latin-american/learning-goals-objectives/>

Curricular Requirements for the Major

A. The Major

General Requirements

- All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core>
- The Latin American Studies major must be combined with another major at Canisius;
- There are no limits on the number of courses that count for this major that also apply to another major;
- Modern Language Requirement: At least a C in SPA 217 or its equivalent;
- The Program Director can allow students to pursue French on an exceptional basis to take into account the French-speaking parts of "Latin America";
- the Program Director can also allow a lower level of coursework in Portuguese to fulfill this requirement (e.g., if combined with a study abroad in Brazil);
- Study Abroad Requirement: an approved short term or semester-long program in Latin America or the Caribbean.

Ten Required Courses

Social Science and History – 3 courses

- all three courses must be taken at Canisius; students must choose to take one of each of the following two academic disciplines:

HIS 131	Latin American History to 1800
HIS 132	Latin American History since 1800
PSC 150	Introduction to Comparative Politics and Government
PSC 250	Politics in Latin America

The third course must be taken from any of the following academic departments/disciplines:
Business, Education, History, Political Science and Honors.

Language, Literature, and Culture – 3 courses

- Must be taken at Canisius from at least two of the following academic departments/disciplines:
Modern Languages, Literature and Culture, Religious Studies, Philosophy, Fine Arts History, Fine Arts Music, and Honors.

PROGRAM OF STUDY LATIN AMERICAN STUDIES

Major Electives – 3 courses

- may be taken in any discipline and/or abroad;
- could include a service-learning course at Canisius involving the Latino community in Western New York.

Senior Capstone – 1 course

- Core or major capstones fulfill this requirement if students complete a major project on Latin America and/or Latin@s in the United States.

B. The Minor

General Requirement:

- Modern Language Requirement: At least a C in SPA 217.

Six Required Courses

Social Science & History – 3 courses

- must be taken from at least two of the following academic departments/disciplines: Business, Education, History, Political Science and Honors.

Language, Literature, and Culture – 3 courses.

- must be taken from at least two of the following academic departments/disciplines: Modern Languages, Literature and Culture, Religious Studies, Philosophy, Fine Arts, History, Fine Arts Music, and Honors.

This flexible structure of the major and minor enables students to appreciate the social, economic, political, cultural, and historical context of the subject matter, encouraging them to develop critical interdisciplinary skills. While the LAS program will include attention to the Latino communities in Western New York and the United States, its coursework and extracurricular experiences will move beyond these boundaries to view these communities as being embedded within global processes.

PROGRAM OF STUDY MANAGEMENT

MANAGEMENT

Chair: Gordon W. Meyer, 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 10 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 <http://www.canisius.edu/management/index.dot>

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 Management of Technology. Alternatively, they can work with an advisor in the department to choose their electives to fit their individual interests or needs.

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/management/learning-goals-objectives/>

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. All majors should work closely with their advisor to discuss career expectations, choose their major electives, develop their entire academic program and plan their co-curricular experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

PROGRAM OF STUDY MANAGEMENT

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements necessary to reach a minimum of 120 credit hours for graduation. Students may graduate with more, but not less, than 120 credit hours.

Major Course Requirements: (20 or 21 courses)

Course	Title	Credits
Common body of business knowledge:		
MAT 105 and MAT 106 or MAT 111 or MAT 115	Finite Mathematics Calculus for the Non-Sciences Calculus I Calculus for Business I	3 3 4 4
ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 255	Business Statistics I	3
ECO 256	Business Statistics II	3
FIN 201	Introduction to Finance	3
ISB 101	Management Technology	3
MGT 101	Introduction to Management	3
MGT 370	Managerial Environment	3
MGT 446	Managerial Policy/Strategy	3
MKT 201	Principles of Marketing	3
Management major:		
MGT 335	Management Science	3
MGT 336	Production/Operations Management	3
MGT 360	Organizational Behavior	3
MGT 364	Human Resources Management	3

Major 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. Please consult your academic advisor or the advisement guide that is published each semester for an up-to-date list of these courses.

Restricted Electives (must be in Arts & Sciences): Four courses

Free Electives: Three or four courses

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. All business majors must complete a two course sequence of classes that emphasize either a modern language or a non-U.S. culture. If students elect to satisfy the requirement by taking language courses, the courses must be in the same modern language. 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. Both classes must be related to the same culture (e.g. two courses about Asian history, two courses about European culture, two Latin American or Hispanic courses, etc.)

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).

PROGRAM OF STUDY MANAGEMENT

Other Programs of Interest

Entrepreneurship Major

The Management department also offers a major in Entrepreneurship. Complete details are listed elsewhere in the catalog under Entrepreneurship.

International Business Major

The Management department also offers a major in International Business. Complete details are listed elsewhere in the catalog under International Business.

Minor in Industrial/Organizational Psychology

This interdisciplinary program, which is open to management majors, combines management and psychology courses. See your advisor or the information under Psychology in the college catalog for details.

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.

PROGRAM OF STUDY
MANAGEMENT

Recommended Semester Schedule for Management Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
FYS 101	3	ENG 101	3
MAT 105	3	MAT 106	3
or		or	
MAT 111	4	Free Elective if MAT 115/111 taken in fall	
or		PHI 101	3
MAT 115	4	ECO 102 Micro	3
RST 101	3	MGT 101	3
ECO 101 (Field of Knowledge 5 Social Science)	3		
ISB 101	3		
Sophomore		Sophomore	
MKT 201	3	FIN 201	3
ACC 201	3	ACC 202	3
Field of Knowledge 4 History	3	Field of Knowledge 3 Arts	3
ECO 255 (Field of Knowledge Math)	3	ECO 256 STATS 2	3
Business International Requirement	3	Business International Requirements	3
Junior		Junior	
MGT 335	3	MGT Elective or MGT minor course	3
MGT 336	3	MGT 364 Human Resources – Spring only	3
MGT 360 – Fall only	3	Arts and Sciences Elective	3
Field of Knowledge 6 Science	3	Field of Knowledge 1 Religion	3
Field of Knowledge 2 Philosophy (with ethics attribute)	3	Arts and Sciences Elective	
Senior		Senior	
MGT 370	3	MGT 446	3
MGT Elective or MGT minor course	3	MGT Elective or MGT minor course	3
Free Elective	3	Free Elective	3
Arts and Sciences Elective	3	Arts and Sciences Elective	3
Core Capstone	3	Free Elective	3

PROGRAM OF STUDY MANAGEMENT

Dual Majors

Highly motivated students may choose to enhance their career potential and enrich their business and/or academic background by completing a dual major. Students can major in Management and another field of interest to the student including Economics, Entrepreneurship, Finance, International Business, Marketing, Modern Languages, Psychology, etc. These dual majors usually require some additional courses beyond the normal 120 credit hours to complete. To declare a dual major, the student must complete the Majors & Minors Declaration form and obtain the signature of each department chairperson.

Minors

A listing of all available minors can be found under the Academic Curricula section of the catalog. 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 Majors & Minors Declaration form to declare a minor. Students must maintain a 2.0 grade point average in courses credited toward completion of any minor administered by the Department of Management.

Management Minors

Management students may choose a minor 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 minors in business management to complement their major in another field. Minors available within the Management major are: Global Logistics and Supply Chain Management, Human Resource Management, International Management, and Management of Technology.

Non-business majors must take MGT 101 Introduction to Management and ECO 255 Business Statistics (or its equivalent) or MAT 105 Finite Mathematics (or its equivalent) prior to beginning some of the minors.

Global Logistics and Supply Chain Management (GLSCM) Minor

Effective 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.

MGT 325 or MGT 336 are prerequisites for many of the elective courses and should be completed by the end of the junior year.

PROGRAM OF STUDY MANAGEMENT

Required Courses – Complete the following courses:

Course	Title	Credits
MKT 201	Principles of Marketing	3
MGT 336 or MGT 325	Production/Operations Management (Management Majors)	3
	Operations Analysis for Business (Non-management Majors)	3
MGT 440 or MKT 478	Global Supply Chain Management	3
	Global Logistics/Transportation (Students completing both MGT 440 and MKT 478 may count one of those courses as an elective.)	3
Minor Elective Courses – Complete two of the following:		
MGT 334	Strategic Sourcing	3
MGT 430	Sustainability and Supply Chains	3
MGT 440 or MKT 478	Global Supply Chain Management	3
	Global Logistics/Transportation (Students completing both MGT 440 and MKT 478 may count one of those courses as an elective.)	3
MGT 474/ MKT 474	Doing Business in Canada	3
MGT 475	Doing Business in Latin America	3
MGT 492	Internship in Global Logistics and Supply Chain Management 1	3
ACC 307	Management Accounting Information Systems	3
ACC 452	Enterprise Systems	3

Students in the GLSCM minor are expected to become members of the Canisius Chapter of APICS – The Association of Operations Management. Non-business majors must take MGT 101 Introduction to Management and ECO 255 Business Statistics I or MAT 105 prior to beginning the program.

The 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.

Required Courses – Complete the following three courses:

Course	Title	Credits
MGT 360	Organizational Behavior (Fall)	3
MGT 364	Human Resource Management (Spring)	3
MGT 460	Ethical Power and Influence for Leaders (Fall)	3
Minor Elective Courses – Complete three of the following (at least one in COM and one in PSY):		
COM 204	Interpersonal Communication	3
COM 302	Small Group Communication (Fall)	3
COM 318	Organizational Communication (Fall)	3
COM 319	Training and Development (Spring)	3
COM 418	Interviewing (not offered every academic year)	3
MGT 367	Labor and Employee Relations (not offered every academic year)	3
MGT 493	Internship in Human Resource Management	3
PSY 329	Leadership and Motivation (Spring)	3
PSY 395	Assessment in the Behavioral Sciences (Fall)	3

PROGRAM OF STUDY MANAGEMENT

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).

International Management Minor

In light of the internationalization of today's business environment, this minor enables students to acquire knowledge and competence in the practice of management on the global stage.

Required Courses – Complete the following two courses:

Course	Title	Credits
IBUS 301	Fundamentals of International Business	3
MGT 472	Comparative Management Systems	3
Minor Electives – <i>Complete Three of the following:</i>		
ECO 460	International Trade	3
ENT 312	International Entrepreneurship	3
FIN 460	International Finance	3
IBUS 495	Internship in International Management	3
MGT 438	Entry Strategies for Emerging Markets	3
MGT 440	Global Supply Chain Management	3
MGT 475	Doing Business in Latin America	3
MKT 478	Global Logistics	3

Students in this minor are encouraged to seriously consider taking advantage of one of the college's study-abroad opportunities.

Management of Technology Minor

In a time of constant technological change, managers will be increasingly called upon to manage new products, processes and systems. In addition to providing a fundamental understanding of the field, this track helps students prepare for the six professional certification examinations of the Association of Operations Management

(APICS). APICS certification should significantly improve a student's employment prospects.

Required Courses – Complete the following three courses:

Course	Title	Credits
MKT 101	Introduction to Management	3
ECO 255	Business Statistics I (or equivalent)	3
MGT 336 or MGT 325	Production/Operations Management (Management Majors) Operations Analysis for Business (Non-management Majors)	3 3
Elective Courses – <i>Complete three of the following:</i>		
MGT 434	Technology Management	3
MGT 436	Quality Management	3
MGT 437	Project Management	3
MGT 439	Operations Planning and Control	3
MGT 440	Global Supply Chain Management	3
MGT 494	Internship in Technology/ Operations Management	3

MGT 325 or MGT 336 are prerequisites for many of the elective courses in this minor and should be completed by the end of the junior year.

Students in the Management of Technology minor are expected to become student members of the Canisius Chapter of APICS – The Association for Operations Management. Non-business majors must take MGT 101 Introduction to Management and ECO 255 Business Statistics I or MAT 105 prior to beginning the program.

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. To complete the business management minor, students must complete:

Required Courses - Complete the following courses:

PROGRAM OF STUDY MANAGEMENT

Course	Title	Credits
MGT 101	Introduction to Management	3
ECO 255 or	Business Statistics I (or the equivalent)	3
MAT 105	Finite Mathematics	3
MGT 325	Operations Analysis for Business	3
MGT 360 or MGT 364	Organizational Behavior (Fall) Human Resource Management (Spring)	3 3
PHI 242 or MGT 370 (with permission of instructor)	Ethical Issues in Business Managerial Environment	3 3

Two electives from the following list (or other business courses approved by the chair of the Management Department):

- ENT 201 – Introduction to Entrepreneurship *Fall*
- ENT 314 – Social Entrepreneurship (Justice attribute) *Spring*
- IBUS 301 – Fundamentals of International Business *Fall*
- ISB 302 – Sustainability and System Dynamics (has core curriculum Justice attribute)
- MGT 307 – U.S. Business History
- MGT 334 – Strategic Sourcing
- MGT 360 or 364 (whichever not taken for the above required 5 courses)
- 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

No more than 8 courses in the Wehle School of Business may be counted toward the Management minor.

Though it is not required, students may want to choose their electives in the Management minor thematically. For example:

Process perspective on management: MGT 334, MGT 436, MGT 437, or MGT 440

People perspective on management: MGT 360 or 364, MGT 367, or MGT 460

Sustainability perspective on management: MGT 430, ISB 302, or ENT 314

International perspective on management: IBUS 301, MGT 380, MGT 472, or MGT 475

2015- 2017 MANAGEMENT COURSES

Required courses for management and/or other business majors

MGT 101 Introduction to Management 3 credits

Organization design and management, including traditional and modern theories. The managerial functions and processes, including planning, organizing, leading and controlling, decision-making, behavioral factors/issues and production function. *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. Prerequisites: ECO 255, or other acceptable statistics courses. This is NOT a MGT elective. *Fall/Spring*

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. Prerequisites: ECO 255. *Fall/Spring*

PROGRAM OF STUDY MANAGEMENT

MGT 336 Production/Operations Management 3 credits

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. Prerequisites: MGT 335 or concurrent registration. *Fall/Spring*

MGT 360 Organizational Behavior 3 credits

Organizational functioning at the individual, group, and system levels. Topics include social perception, communications, leadership and motivation, organization design and change. Course includes experiential practice of related managerial skills. Prerequisites: MGT 101, sophomore standing. *Fall*

MGT 364 Human Resources Management 3 credits

Focuses on a firm's human-resources management activities. Topics include contemporary approaches to staffing, performance evaluation, compensation and union-management relations. Prerequisites: MGT 101, junior standing. *Spring*

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: senior status and MGT 101. *Fall/Spring*

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. Prerequisite: Taken in the last semester of the senior year. *Fall/Spring*

Elective Courses in Management

Note: Additional or different management electives may be offered. Students should consult the semester-specific Registration and Advisement Guide and/or their academic advisor.

MGT 334 Strategic Sourcing 3 credits

The objective of this course is to expose students to the demands placed on purchasing and supply chain managers, the competitive impact purchasing has on the success and profitability of the organization, the strategic nature of purchasing, and its cross-functional interactions. Topics include the purchasing process, policies organization and procedures, supplier evaluation and selection, supplier quality management, worldwide sourcing, negotiations and contract management. In addition, purchasing law ethics, the purchasing of services and future trends are addressed. Elective. *Offered occasionally Fall or 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. Elective. *Offered occasionally Fall or 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. Prerequisites: MGT 360, junior standing. Elective. *Offered occasionally Fall or 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. Prerequisites: Open to upper-level business majors and to others with instructor approval. 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. Elective. *Fall/Spring/Summer*

PROGRAM OF STUDY MANAGEMENT

MGT 430 Sustainability and Supply Chains 3 credits

Key approaches and issues relating to environmental and sustainable operations and supply chain management including the triple bottom line, lean operations, closed loop supply chains, design for the environment (DFE), remanufacturing, reverse logistics, and "green buildings" initiatives. Elective. Prerequisites: MGT 101. *Offered occasionally Fall or Spring*

MGT 434 Technology Management 3 credits

Management of new product development in organizations with focus on the technology and innovation process. Both theoretical and practical aspects of managing this process are considered. Prerequisites: MKT 201, MGT 360. Elective. *Offered occasionally Fall or Spring*

MGT 436 Quality Management 3 credits

Tools, techniques, and strategies used in quality management. Application of current ideas in the field to problem-solving and case analysis. Emphasis on quality issues relating to technological innovation and implementation. Prerequisite: MGT 336. Elective. *Offered occasionally Fall or Spring*

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. Prerequisite: MGT 335 or MGT 325 Elective. *Offered occasionally Fall or Spring*

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. Prerequisite: ECO 101 & 102, MGT 101. *Offered occasionally Fall or Spring*

MGT 439 Operations Planning and Control 3 credits

Series of topics designed to target the professional certification examinations in supply chain management conducted by APICS – The Association of Operations Managements. Prerequisite: MGT 336. Elective. *Offered occasionally Fall or Spring*

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. Prerequisite: MGT 336 or MGT 325. Elective. *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. Prerequisites: MGT 101 or approval from instructor. Elective. *Fall*

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. Prerequisite: MGT 101 or permission of instructor. Elective. *Spring only*

PROGRAM OF STUDY MANAGEMENT

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. *Fall/Spring*

Internship course numbers: 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.

MGT 492 Internship in Global Supply Chain Management 3 credits

Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean. Elective. *Fall/Spring*

MGT 493 Internship in Human Resource Management 3 credits

Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean. Elective. *Fall/Spring*

MGT 494 Internship in Technology/Operations Management 3 credits

Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean. Elective. *Fall/Spring*

MGT 495 Internship in International Management 3 credits

Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean. Elective. *Fall/Spring*

MGT 496 Management Internship 3 credits

Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean. Elective. *Fall/Spring*

MGT 499 Management Independent Study 3 credits

Student must complete an Independent Study Application Form and obtain the approval of a faculty supervisor, department chair and the associate dean. Elective. *Fall/Spring*

COURSES IN OTHER MAJORS GRANTED MANAGEMENT ELECTIVE CREDIT

Students should consult the semester-specific Registration and Advisement Guide, their academic advisor, or the department chair to see if there are other courses which are acceptable for management elective credits.

ENT 311 Entrepreneurship and Family Business 3 credits *Fall only*

ENT 401 Small Business Management and Entrepreneurship 3 credits *Spring only*

ENT 402 New Venture Creation 3 credits *Fall only*

ENT 414 Franchising and Entrepreneurship 3 credits

ISB 302 Sustainability and System Dynamics 3 credits

MKT 474 Doing Business in Canada 3 credits

MKT 478 Global Logistics 3 credits

PROGRAM OF STUDY
MARKETING & INFORMATION SYSTEMS

MARKETING

Chair: Edward J. Garrity, PhD

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 <http://www.canisius.edu/marketing/index.dot>

Learning Goals and Objectives

For the marketing program learning goals and objectives, please go to <http://www.canisius.edu/marketing/learning-goals-objectives/>

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. 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 Requirements for the Major Core Requirement

All students complete Core Curriculum requirements as part of their overall Canisius education. These Requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY
MARKETING & INFORMATION SYSTEMS

Major Courses

Major Course Requirements: (20 or 21 Courses)

Course	Title	Credits
A. Common body of business knowledge:		
MAT 105 and MAT 106 or MAT 111 or MAT 115 and Free Elective	Finite Mathematics Calculus for the Non-Sciences Calculus I Calculus for Business I	3 3 4 4
ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3
ECO 101	Principles of Microeconomics	3
ECO 102	Principles of Macroeconomics	3
ECO 255	Business Statistics I	3
ECO 256	Business Statistics II	3
FIN 201	Introduction to Finance	3
ISB 101	Management Technology	3
MGT 101	Introduction to Management	3
MGT 325	Operations Analysis	3
MGT 370	Managerial Environment	3
MGT 446	Managerial Policy Strategy	3
MKT 201	Principles of Marketing	3
B. Marketing major:		
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

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. Digital Marketing (MKT 350) is a new required course in the program for all students who enter the college in the fall of 2015 (it was previously numbered MKT 450). International Marketing (MKT 375) was previously numbered MKT 475.

Major Electives

Marketing majors are required to take two (2) elective courses (6 credit hours) in marketing. Some courses offered by other programs may be used as marketing electives. Please consult your academic advisor for details.

Major Experiences

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. 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: <http://tiny.cc/ccama>

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.

PROGRAM OF STUDY
MARKETING & INFORMATION SYSTEMS

Recommended Semester Schedule for Marketing Major

Fall	Credits	Spring	Credits
Freshman		Freshman	
FYS 101	3	ENG 101	3
MAT 105 or MAT 115 or MAT 111	3 4 4	MAT 106 or A&S elective if MAT 115/111	3
RST 101	3	PHI 101	3
ECO 101 MACRO	3	ECO 102 MICRO	3
ISB 101	3	MGT 101	3
Sophomore		Sophomore	
MKT 201	3	FIN 201	3
ACC 201	3	ACC 202	3
History Field 4	3	Arts Field 3	3
ECO 255	3	ECO 256	3
Business International Requirement	3	Business International Requirement	3
Junior		Junior	
MKT 320	3	MKT 331	3
MGT 325	3	MKT 375	3
Religious Studies Field 1	3	MGT 370	3
Science Field 6	3	Philosophy Field 2 (Ethics required)	3
MKT 350	3	A & S Elective	3
Senior		Senior	
MKT 401	3	MGT 446	3
MKT Elective	3	MKT Elective	3
A & S Elective	3	A&S Elective	3
Core Capstone	3	Free Elective	3
A & S Elective	3	Free Elective	3

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.

PROGRAM OF STUDY

MARKETING & INFORMATION SYSTEMS

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. All business majors must complete a two course sequence of classes that emphasize either a modern language or a non-U.S. culture. If students elect to satisfy the requirement by taking language courses, the courses must be in the same modern language. 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. Both classes must be related to the same culture (e.g. two courses about Asian history, two courses about European culture, two Latin American or Hispanic courses, etc.)

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.

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.

Dual Majors

Highly motivated students may choose to enhance their career potential and enrich their business background by completing a dual major. Students sometimes dual major in areas such as Management, International Business, Finance, Modern Languages, Economics, Psychology, etc. These dual majors require some additional courses to complete beyond the normal curriculum.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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: This minor is designed to enhance students' competitiveness in the job market by developing computer and data analytic skills that are of growing importance in a broad range of careers and industries. Five courses are required for this minor.

Course	Title
ISB 101	Management Technology
ISB 205	Data Visualization & Project Management
ISB 340	Data Management
ISB 360	Decision Support Systems
ISB 440	Marketing Data Analytics

Note: Admission to the Information Systems major was closed to new students at the end of the summer 2015 semester. Students who are currently Information Systems majors will be allowed to complete the program. Students interested in careers in Information Systems are encouraged to consult with the department chair for advice regarding courses and extra-curricular activities that will prepare students for jobs in this field.

PROGRAM OF STUDY
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The Inter-Disciplinary Minor in Computer Forensics

Computer forensics is the science of acquiring, preserving, retrieving and presenting data that has been processed electronically and stored on electronic media. Computer forensics refers to E-mail and instant message (IM) forensics, cellular phone and digital camera forensics, PDA and iPod forensics, GPS and Internet forensics.

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

Course	Title
CRJ 227	Criminal Justice I
CRJ 228	Criminal Justice II
ISB 350	Security & Networking
ISB 460	Computer Forensics
ISB 470	Cyber Security
An ethics course:	
MGT 370 or CRJ 482	Managerial Environment Criminal Justice Ethics (SOC 482)

2015 – 2017 MARKETING COURSES

Required courses for marketing majors

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. *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. *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. Prerequisites: MKT 201, ISB 201, ECO 255 and ECO 256. *Spring*

MKT 350 Digital Marketing (formerly MKT 450) 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). Prerequisite: MKT 201. *Fall*

MKT 375 International Marketing (formerly MKT 475) 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. Prerequisite: MKT 201 or permission of instructor. (Global Awareness attribute) *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. Prerequisites: FIN 201, ACC 201 and ACC 202, MGT 325 (or MGT 335, MGT 336), MKT 201, MKT 320. *Fall*

PROGRAM OF STUDY

MARKETING & INFORMATION SYSTEMS

Elective Courses In Marketing

Note: Additional or different marketing electives may be offered. Students should consult the department.

MKT 362 Social Media Marketing Foundation **3 credits**
(formerly MKT 392)
Explore the power of social media as a marketing tool. This course will help students learn about a variety of social media strategies and tactics. Prerequisites: MKT 201. (Elective)

MKT 370 Special Topics in Digital Marketing and Social Media Exact topics to be covered depend on recent advances and applications in digital marketing and social media. Prerequisites: MKT 201. *Fall*

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. Prerequisites: MKT 201.

MKT 474 Doing Business in Canada **3 credits**
This course is an introduction to managing a business in Canada. The commercial aspects of the Canadian marketplace are explored as well as in-depth analyses of individual Canadian businesses are central to this course. Prerequisites: MKT 201, MKT 375. (Elective)

MKT 478 Global Logistics **3 credits**
This course is an introduction to logistics and transportation aspects of the distribution of goods in North America. The advantages and disadvantages of the different modes of transportation and their impact on business decisions are explored in detail. Prerequisites: MKT 201, MKT 331. (Elective)

MKT 496 Marketing Internship **3 credits**
Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean.

MKT 497 FIT Internship **15 credits**
For students in the Fashion Institute of Technology program. Prerequisite: Approval of chair or FIT coordinator.

MKT 499 Marketing Independent Study/Research **3 credits**
Student must complete an Independent Study Application Form and obtain the approval of a faculty supervisor, department chair and the associate dean.

2015 – 2017 INFORMATION SYSTEM COURSES

ISB 101 Management Technology **3 credits**
Introduction to information systems, hardware and software; information systems concepts in business; telecommunications; Ecommerce; enterprise systems; ethics, crime and security. Hands-on development of business applications. *Fall/Spring*

ISB 205 Data Visualization & Project Management **3 credits**
Students learn the latest management software packages, data analytics, and apps to support organizational and mobile workers, managers, business operations, and strategy. Topics include project management software and methods, data visualization, enterprise mashups, data analytics, cloud services, collaboration, and productivity tools. (Counts as marketing elective) *Fall*

ISB 211 Visual Programming for Business **credits**
Introduction to the Visual Basic programming language and fundamentals of software design. Database programming, interface design and general problem solving with an emphasis on business applications. Prerequisite: ISB 101. *Spring*

PROGRAM OF STUDY

MARKETING & INFORMATION SYSTEMS

ISB 302 Sustainability & System Dynamics **3 credits**

An introduction to systems thinking and system dynamics. Uses tools and computer models to help solve interdisciplinary problems including issues of environmental, human and economic sustainability. Using computer based models or virtual worlds, one can then test the consequences of actions before making actual decisions. (Field 5, justice attribute) *Fall/Spring/Summer*

ISB 340 Data Management **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. *Fall*

ISB 350 Security & Networking **3 credits**

Digital (data) and voice networks; network hardware, software, security and protocols. Wired and wireless communication. Prerequisite: ISB 101 or equivalent. *Fall*

ISB 360 Decision Support Systems **3 credits**

Decision support systems is centered on spreadsheet development and decision analysis of marketing and financial decisions in a business case context. Prerequisite: ISB 101 (counts as Marketing elective) *Spring*

ISB 440 Marketing Data Analytics **3 credits**

This course is an introduction to big data and data analytics for business, data visualization, business intelligence (BI), data and text mining, and sentiment analysis. Students learn to use data visualization, dashboard, and data analytics software. Prerequisite: ISB 101 (counts as Marketing elective) *Fall*

ISB 455 ECommerce **3 credits**

Fundamentals of E-commerce applications and technologies. Interactive website and or consumer shopping e-commerce design and development. Prerequisite: ISB 340. (counts as Marketing elective) *Spring*

ISB 460 Computer Forensics **3 credits**

Introducing forensics tools to investigate computers, networks, Internet activities, Email, cell phones and other digital media devices to recover electronic evidence, even if deleted. Skills to investigate crimes involving computers or Internet. Prerequisite: ISB 101 or equivalent. *Spring*

ISB 470 Cyber Security **3 credits**

Technical, legal and policy defenses to protect databases and information systems. Topics considered include intrusion detection, malware, host- and network-based vulnerabilities and countermeasures, database security, identity theft and privacy. Prerequisite: ISB 350. *Spring*

ISB 475 Systems Analysis and Design **3 credits**

In-depth coverage of information systems development. Topics include the systems development life cycle, analysis methods, data flow diagramming, design tools, and project management techniques and concepts. Prerequisite: ISB 340, ISB 350, and senior standing. *Spring*

ISB 496 Internship **3 credits**

Student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair and the associate dean.

ISB 499 Independent Study **3 credits**

Student must complete an Independent Study Application Form and obtain the approval of a faculty supervisor, department chair and the associate dean.

PROGRAM OF STUDY
MATHEMATICS AND STATISTICS

MATHEMATICS AND
 STATISTICS

**Co-Chairs: Byung-Jay Kahng, PhD;
 Christine Kinsey, 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 <http://www.canisius.edu/mathematics/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/mathematics/learning-goals-objectives>

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. 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. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major course requirements:

Option A (Mathematics Major):		
Course	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222 or MAT 351	Differential Equations or Probability and Statistics	3 3
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 321	Real Analysis	4
MAT 380-381-480	Mathematics Seminar	1-1-1
One of the following:		
MAT 312	Topics in Algebra	3
MAT 322	Topics in Analysis	3
MAT 352	Probability and Statistics II	3
Option B (Mathematics with a concentration in another area):		
	4 additional courses chosen from 300 or 400-level mathematics courses or PHY 335-336	12-16 credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222 or MAT 351	Differential Equations or Probability and Statistics	3 3
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 321	Real Analysis	4

PROGRAM OF STUDY

MATHEMATICS AND STATISTICS

MAT 380-381-480	Mathematics Seminar	1-1-1
One of the following:		
MAT 312 or MAT 322 or MAT 352	Topics in Algebra or Topics in Analysis or Probability and Statistics II	3 3 3
	2 additional courses chosen from 300 or 400-level mathematics courses or PHY 335-336	6-8 credits
Option C (Statistics):		
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
MAT 322 or MAT 311	Topics in Analysis or Abstract Algebra	3 4
MAT 351	Probability and Statistics I	3
MAT 352	Probability and Statistics II	3
MAT 380-381-480	Mathematics seminar	1-1-1
	Three of the following:	Total of 9 credits
MAT 341	Numerical Analysis	3
MAT 353	Regression Analysis	3
MAT 354	Experimental Design and Statistical Computing	3
MAT 365	Logistic Regression	3
MAT 370	Topics in Statistics	3

Major Electives:

Option A: PHY 223-224 General Physics (4-4) or two economics courses (3-3)

Option B: PHY 223-224 General Physics (4-4) or two economics courses (3-3), four courses in another area approved by the Department of Mathematics and Statistics

Option C: PHY 223-224 General Physics (4-4) or two economics courses (3-3)

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.

PROGRAM OF STUDY
MATHEMATICS AND STATISTICS

Recommended Semester Schedule for Major Courses

Fall	Credits	Spring	Credits
Freshman		Freshman	
Option A-B-C MAT 111	4	Option A-B-C MAT 112 PHY 223 or ECO course	4 4-3
Sophomore		Sophomore	
Option A-B-C MAT 211 MAT 230 PHY 224 or ECO course	4 4 4 3	Option A-B MAT 219 MAT 222 or MAT 351 Option C MAT 219 MAT 351	4 3 4 3
Junior		Junior	
Option A-B MAT 311 MAT 321 MAT 380 Option C MAT 321 MAT 352 MAT 380	4 4 1 4 3 1	Option A-B MAT 381 MAT elective Option C MAT 381 MAT 222 or 322 or MAT elective Statistics elective: MAT 341 or 353 or 354 or 365 or 370	1 3 1 3 3
Senior		Senior	
Option A MAT 480 MAT elective MAT elective Option B MAT 480 MAT elective Option C MAT 480 MAT 311 or MAT elective Statistics elective: MAT 341 or 353 or 354 or 365 or 370	1 3 3 1 3 1 3 3	Option A One of MAT 312 or 322 or 352 MAT elective Option B One of MAT 312 or 322 or 352 Option C MAT 222 or 322 or MAT elective Statistics elective: MAT 341 or 353 or 354 or 365 or 370	3 3 3 3 3

PROGRAM OF STUDY

MATHEMATICS AND STATISTICS

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. 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. Before a student declares a dual major it is important to meet with the appropriate academic departments for advisement. Many 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.

Mathematics Minor: (7 courses)

Course	Title	Credits
MAT 111 or MAT 115	Calculus I or Calculus for Business	4
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: two courses from any one of the following tracks:	
Probability and Statistics		
MAT 351	Probability and Statistics I	3
MAT 352	Probability and Statistics II	3
Applied Mathematics		
MAT 222	Differential Equations	3
PHY 335	Mathematical Analysis for Physicists I	4
PHY 336	Mathematical Analysis for Physicists II	4
MAT 341	Numerical Analysis	3
MAT 342	Graph Theory	3

Theoretical Mathematics		
MAT 311	Abstract Algebra	4
MAT 312	Topics in Algebra	3
MAT 313	Number Theory	3
MAT 321	Real Analysis	4
MAT 322	Topics in Analysis	3
Mathematics and Culture		
MAT 301	History of Mathematics	3
MAT 331	Geometry	3

2015 – 2017 MATHEMATICS AND STATISTICS 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. (Field 7) Fall/Spring

MAT 106 Calculus for the Non-Sciences I 3 credits

Fundamentals of calculus for students in business, or social or behavioral sciences. Credit not allowed if student already has credit for MAT 109-110 or MAT 111 or MAT 115. (Field 7) Fall/Spring

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. (Field 7) *Summer*

MAT 109-110 Calculus with Review I and II 4-4 credits

For science and mathematics majors. Calculus, with topics from pre-calculus. Logarithms, exponentials, trigonometric functions, limits, differentiation, related rates, optimization problems, anti-differentiation, definite integral. Credit not allowed if student already has credit for MAT 111 or MAT 115. (Field 7) *MAT 109 Fall; MAT 110 Spring*

PROGRAM OF STUDY

MATHEMATICS AND STATISTICS

MAT 111 Calculus I **4 credits**

For science and mathematics majors. 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 109-110 or MAT 115. (Field 7) *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: MAT 109-110 or MAT 111 or MAT 115 with minimum grade C-. (Field 7) *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 MAT 109-110 or MAT 111. Prerequisite: 3 1/2 years of high school mathematics. (Field 7) *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. (Field 7, Global Awareness Attribute) *Spring*

MAT 131 Statistics and Computers **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: High school intermediate algebra. (Field 7) *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. (Field 7) *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. (Field 7, Justice Attribute) *Spring*

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. *Fall*

MAT 181 Symmetry **3 credits**

Liberal arts course exploring the mathematical world of geometry and symmetry. Measurement, billiards, polygons and polyhedra, tilings and wallpaper patterns, spirals and natural growth. Prerequisite: 3 years of high school mathematics or equivalent. (Field 7) *Fall*

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, graphs. Prerequisite: Sophomore standing or instructor's permission. *Spring*

PROGRAM OF STUDY

MATHEMATICS AND STATISTICS

MAT 211 Calculus III	4 credits	MAT 321 Real Analysis	4 credits
Continuation of MAT 111-112. Analytic geometry of 3-dimensional space and calculus of functions of several variables. Prerequisite: MAT 112 with minimum grade of C-. <i>Fall/Spring</i>		Advanced study of differentiation and integration of functions. Prerequisites: MAT 211, 230, 219 with minimum grades of C-. <i>Fall</i>	
MAT 219 Linear Algebra	4 credits	MAT 322 Topics in Analysis	3 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 consent of the instructor. <i>Spring</i>		Continuation of MAT 321. Selected topics from functions of one or several variables. Prerequisite: MAT 321 with minimum grade of C-. <i>Spring 2016</i>	
MAT 222 Differential Equations	3 credits	MAT 331 Geometry	3 credits
Introduction to the theory and applications of ordinary differential equations. Prerequisite: MAT 211 with minimum grade of C-. <i>Spring</i>		Axioms for geometry and their consequences: independence of the parallel postulate. Rudiments of hyperbolic geometry. Geometric transformations. Prerequisite: MAT 230. <i>Fall</i>	
MAT 230 Logic, Set Theory, and Proofs	4 credits	MAT 341 Numerical Analysis	3 credits
Transition from calculus to upper division courses: logic and methods of proof; set theory; relations, orders and functions; number systems; cardinality. Prerequisite: MAT 112 with minimum grade of C- or consent of the instructor. <i>Fall</i>		The methods used to obtain numerical solutions of functional and differential equations. Polynomial interpolation. Various approximation algorithms. Prerequisites: An elementary knowledge of computer programming and MAT 219. <i>On demand</i>	
MAT 301 History of Mathematics	3 credits	MAT 342 (CSC 342) Graph Theory	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 111-112. <i>Fall</i>		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. <i>Spring 2016</i>	
MAT 311 Abstract Algebra	4 credits	MAT 351-352 Probability and Statistics	3-3 credits
Introduction to the basic structures of abstract algebra; groups, rings, fields. Prerequisites: MAT 230 and MAT 219 with minimum grades of C-. <i>Fall</i>		Introduction to the mathematical aspects of modern probability theory and the theory of statistics. Prerequisite: MAT 211. <i>MAT 351 Spring; MAT 352 Fall</i>	
MAT 312 Topics in Algebra	3 credits	MAT 353 Regression Analysis	3 credits
Continuation of MAT 311. Selected topics from rings, Integral domains, field extensions and Galois theory. Prerequisite: MAT 311. <i>Spring 2017</i>		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. Prerequisites: MAT 351-352 or consent of instructor. <i>Fall 2015</i>	
MAT 313 Number Theory	3 credits		
Divisibility, prime numbers, numerical functions, congruencies, quadratic reciprocity, Diophantine equations. Prerequisite: MAT 311 or permission of instructor. <i>On demand</i>			

PROGRAM OF STUDY MATHEMATICS AND STATISTICS

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. Prerequisites: MAT 351-352 or permission of instructor. *Fall 2016*

MAT 361: Actuarial Review I 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. Prerequisites: MAT 111-112, MAT 211, and MAT 351-352 or permission of instructor. *Fall*

MAT 362: Actuarial Review II 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. Prerequisites: MAT 111-112, MAT 211 and MAT 351-352 or permission of instructor. *Spring*

MAT 365 Logistic Regression 3 credits

Statistical analysis of dichotomous data. Univariate and multivariate cases are covered. Applied problems solved on the computer. Prerequisite: MAT 352 or ECO 256. *On demand*

MAT 370 Topics in Statistics 3 credits

Prerequisite: MAT 352 or permission of instructor. *Spring 2016*

MAT 380-381-480 Mathematics Seminar 1 credit each

Mathematics seminar for majors. To be taken for three semesters. Prerequisite: Junior standing (Oral Communication Attribute)

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. *On demand*

MAT 416 Differential Geometry 3 credits

Curves in the plane and 3-dimensional space: Frenet formulas, isoperimetric inequalities. Basic elements of surface theory. Curvature and mean curvature. Gauss's Theorema Egregium. Rigidity questions. Prerequisite: MAT 321. *On demand*

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, Rouché's Theorem. Prerequisite: MAT 321 or permission of the instructor. *On demand*

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. Prerequisite: Consent of chair. *On demand*

MAT 499 Independent Study 3 credits

Prerequisite: Consent of instructor and chair. *On demand*

PROGRAM OF STUDY
MEDICAL LABORATORY SCIENCE

MEDICAL LABORATORY SCIENCE

Director: Allyson D. Backstrom, PhD

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 <http://www.canisius.edu/medical-lab/index.dot>

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 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 PhD's, pathologists, clinical laboratory scientists, and others recognized for their experience in the various 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 <http://www.op.nysed.gov/>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/medical-lab/learning-goals-objectives/>

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 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. In addition, all students must complete a minimum of 120 credit hours and maintain a 2.00 overall GPA to graduate from Canisius.

Advisement

All students should have an advisor in the major and should contact the Program Director, Allyson Backstrom, directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

PROGRAM OF STUDY
MEDICAL LABORATORY SCIENCE

Free electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Course Requirements (20 courses)

Course	Title	Credits
BIO 114-114L	Human Biology: Intro to Anatomy & Physiology + Lab	4
BIO 111-111L	Introductory Biology I + Lab	4
BIO 112-112L	Introductory Biology II + Lab	4
BIO 211-211L	Biochemistry & Cell Biology I + Lab	4
BIO 212-212L	Biochemistry & Cell Biology II + Lab	4
BIO 307-307L	Microbiology + Lab	4
BIO 426-426L	Immunochemistry + Lab	4
CHM 111-111L	General Chemistry I + Lab	4
CHM 112-112L	General Chemistry II + Lab	4
CHM 227-227L	Organic Chemistry I + Lab	4
CHM 228-228L	Organic Chemistry II + Lab	4
MAT 141	Inferential Statistics and Computers for Science	4
Science Elective	Two upper level science courses approved by Director	6-8
MDT 280-281	Seminar: Sophomore Level	2
MDT 380-381	Seminar: Junior Level	2
MDT 400-401	Hospital Rotation	30

2015-2017 MEDICAL LABORATORY SCIENCE COURSES

MDT 280-281 Seminar: Sophomore Level **1 credit per semester**

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.

MDT 380-381 Seminar: Junior Level **1 credit per semester**

Advanced discussions of Clinical Science Laboratory theory and practice designed as preparation for senior-year hospital rotation. Tour of hospital laboratory.

MDT 400-401 Hospital Rotation **15 credits per semester**

PROGRAM OF STUDY
MILITARY SCIENCE

MILITARY SCIENCE
PROGRAM (ROTC)

Full-Time Faculty: Lieutenant Colonel William J. Carr; Rebecca M. Sparacino, Lieutenant Colonel (Retired); Major Stephen Ang; Captain Adam Pray; Master Sergeant Donald Durgin; Master Sergeant B. Alan Payne; Sergeant First Class Todd Ligas; Gerard Sobchak, Staff Sergeant (Retired); and Sylvia Thomas.

The Military Science & Leadership (MLS) Program augments the college learning experience. The cornerstone of the program is leadership development. The goal of the MLS Program is to train confident and competent leaders of character for commissioning as officers in the United States Army, or it's Reserve Component. Student's taking MLS will learn organizational, leadership and managerial skills that will prepare them to lead. 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 U.S. 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 111L in the Fall and MLS 102 and MLS 112L in the Spring. A sophomore would enroll in MLS 201 and 211L in the Fall and MLS 202, 212L 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. The Cadet Initial Entry Training (CIET) is held at Fort Knox, KY between either the summer of the student's

freshman and sophomore year or sophomore and junior year. CIET is a mandatory component for students wishing to earn a Commission in the U.S. Army. Students, with prior military service may also receive placement credit directly into the Advanced Course with approval from the department chair.

For more information students should contact the Military Science Department located on the first floor in the Health Science Building.

The following sequence of Military Science 100 and 200 level courses can each be counted as a 3.0 credit, free elective:
MLS 101 (3 credit) and MLS 111L (0 credit) (Fall Semester)
MLS 102 (3 credit) and MLS 112L (0 credit) (Spring Semester)
MLS 201 (3 credit) and MLS 211L (0 credit) (Fall Semester)
MLS 202 (3 credit) and MLS 212L (0 credit) (Spring Semester)

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.

The Advance Course is comprised of MLS 301/311L, MLS 302/312L, MLS 401/411L and MLS 402/412L and MLS 480. Upon completion of this sequence and successful completion of The Cadet Leader's Course (CLC) 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.

The following sequence of Military Science 300 and 400 level courses may be counted as a 3 credit elective:
MLS 301 (3 credits) and MLS 311L (0 credits)
MLS 302 (3 credits) and MLS 312L (0 credits)
MLS 401 (3 credits) and MLS 411L (0 credits)
MLS 402 (3 credits) and MLS 412L (0 credits)

Note: Students are required to sign up and participate in Lab during the Advance Course even though they do not receive credit for the lab.

PROGRAM OF STUDY

MILITARY SCIENCE

MLS 480 U.S. Military History 3 credits
Successful completion of the ROTC program also requires a one-semester course in military history that is offered through the ROTC Department.

Military Science Summer Credit

During the summer, students may receive 3 credits for completing MLS 210 Cadet Initial Entry Training (CIET) 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 Cadet Leader's Course (CLC) 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.

2015-2017 MILITARY SCIENCE COURSES

MLS 101 Introduction to the Army and Critical Thinking 3 credits
This course introduces students to the personal challenges and competencies that are critical for effective leadership. Students learn how the personal development of life skills such as critical thinking, time & stress management, goal setting, and comprehensive fitness relate to leadership, and the Army profession. Optional: Leadership Lab; three one-hour physical fitness sessions; weekend military exercises.
Fall

MLS 102 Introduction to the Profession of Arms 3 credits
This course introduces Students to the personal challenges and competencies that are critical for adaptive leadership. Students learn basic communications skills that are important for leader's to develop. Students examine the Army Profession and what it means to be a professional in the U.S. Army. Optional: Leadership Lab; three one-hour physical fitness sessions; weekend military exercises.
Spring

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 physical fitness sessions, weekend military exercises.
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. Students develop greater self awareness as they assess their own leadership styles and practice communication and team building skills. Optional: leadership labs, three-five one-hour Physical Readiness Training (PRT) sessions, weekend military exercises.
Spring

MLS 111L/112L/211L/212L Basic Course 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. Prerequisite: Concurrent Enrollment in MLS 101, 102, 201 or 202. All students will be required to provide medical documentation that states they are fit to participate in a normal college physical education course. Lab is conducted on Thursday from 3:00-5:00 pm every week.

MLS 210 Cadet Initial Entry Training (CIET) 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. Students must be contracted to attend CIET.
Summer

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MILITARY SCIENCE

MLS 301 Adaptive Team Leadership **3 credits**

This course challenges Cadets to study, practice, and evaluate adaptive leadership skills when presented with challenging scenarios related to squad tactical operations. Cadets receive systematic and specific feedback on their leadership attributes and actions. Based on Cadre/Peer feedback, and self-evaluations, Cadets continue to develop leadership and critical thinking. Prerequisite: Approval of department chair; concurrent registration in MLS 311L. *Fall*

MLS 302 Applied Team Leadership **3 credits**

An academically challenging course where students practice, and apply the fundamentals of Army Officership, utilizing Army Values and ethics, personal development, and small unit tactics at the team/squad level. At the conclusion of this course, students are capable of planning, coordinating, motivating and leading a team/squad. Prerequisite: Approval of department chair; concurrent registration in MLS 312L. *Spring*

MLS 310 Cadet Leaders' Course **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. *Summer*

MLS 311L/312L 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. * Required for MSL 301/302 students.

MLS 401 Mission Command and the Army Profession **3 credits**

Explore the dynamics of leading in the complex situations of current military operations. Students examine differences in customs & courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. Explore aspects of interacting with non-government organizations, civilians, the decision making processes and host nation support. Prerequisites: MSL 301, MLS 302 and MLS 310; concurrent registration in MLS 411L. *Fall*

MLS 402 Mission Command and the Company Grade Officer **3 credits**

Explore the dynamics of leading in the complex situations during Unified Land Operations I, II, and III. Examine the Art of Command. Learn about Comprehensive Soldier Fitness (CSF), Being Ready and Resilient (R2C), and Individual and Family Readiness. Prerequisite: MLS 401; concurrent registration in MLS 412L. *Spring*

MLS 411L/412L 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. *Required for MLS 401/402.

MLS 480 U.S. Military History **3 credits**

Explores the evolution of the United States Army from the Revolutionary War to current operations. Discusses the effects the growth of our nation had on the development of a Professional Army. Utilize the 9-principles of war. Explore the effects politics and international policies have on determining military strategies.

MLS 199/299/399/499 Independent Study **3 credits**

Students study selected military topics under the supervision of a cadre member. Prerequisite: Permission of the Professor of Military Science.

PROGRAM OF STUDY

MODERN LANGUAGES, LITERATURES AND CULTURES

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 majors and minors in French, German, Spanish, and Arabic (minor only) as well as instruction in Chinese, Italian, Polish, and American Sign Language. 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. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/modern-languages/index.dot>

Learning Goals and Objectives

French learning goals and objectives:

<http://www.canisius.edu/modern-languages/french/learning-goals-objectives/>

German learning goals and objectives:

<http://www.canisius.edu/modern-languages/german/learning-goals-objectives/>

Spanish learning goals and objectives:

<http://www.canisius.edu/modern-languages/spanish/learning-goals-objectives/>

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 must have an advisor in the major and minor and should contact the department directly to have an advisor assigned if they do not already have one. In the case of dual and triple majors, students must have an advisor in each department. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not fewer than 120 credit hours.

Major Courses

Single language majors are required to complete twelve courses in a primary language and four courses in a second language at any level. The requirements are two Intermediate level courses: FRC/SPA/GER 215 and FRC/SPA 217/GER 216; three FRC/SPA or four GER Intermediate High level Conversation and Composition courses: FRC/GER/SPA 323-324 and FRC/SPA 332/GER 331-332; and seven Advanced Low courses: SPA/FRC electives, or six GER electives. If starting at 300-level or its equivalent, two additional electives must be completed.

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Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. 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 requirements, 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.

Dual majors in two languages are required to complete 18 courses with 10 courses in the primary language and 8 courses in the secondary language at 200-level and above. Study abroad required for both target languages (see *Study Abroad Requirements*).

Dual majors in languages and other disciplines are required to complete 10 language courses at 200-level and above.

The requirements are two Intermediate level courses: FRC/SPA/GER 215 and FRC/SPA 217/GER 216; three FRC/SPA or four GER Intermediate High level Conversation and Composition courses: FRC/GER/SPA 323-324 and FRC/SPA 332/GER 331-332; and five Advanced Low courses: SPA/FRC electives, or four GER electives. If starting at 300-level or its equivalent, two additional electives must be completed. (Two additional electives for Language/EDAD majors.)

Major Experiences

Study Abroad Requirements

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 the target language. Language majors who choose to spend a semester abroad at a foreign university may count up to three courses as a Modern Language core or elective 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. Students who spend more than one semester studying at a foreign university may count an additional two courses as a Modern Language core or elective. Dual majors in two languages are required to study abroad for both target languages. Credits for short programs abroad are determined by the number of contact hours. 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. Consultation with a department of Modern Languages, Literatures and Cultures academic advisor is required prior to study abroad. 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.

Native Speaker

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.

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MODERN LANGUAGES, LITERATURES AND CULTURES

Additional Course Considerations:

Recommended Semester Schedule for Major Course Requirements:

Fall	Spring
Freshman	Freshman
FRC/GER/SPA 215	FRC/SPA 217, GER 216
Sophomore	Sophomore
FRC/GER/SPA 323 and/or GER 331	FRC/GER/ SPA 324 and/or FRC/GER/ SPA 332
Junior	Junior
Study Abroad	FRC/GER/SPA Elective
Senior	Senior
FRC/GER/SPA Elective	FRC/GER/SPA Elective

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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, after appropriate advising.

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, German or Spanish have the opportunity of studying in Argentina, Costa Rica, Cuba, France, Germany, and Spain.

Students must complete six courses for Language and Culture Minor programs in French, German and Spanish. The requirements are two Intermediate level courses: FRC/SPA/GER 215 and FRC/SPA 217/GER 216; three FRC/SPA or four GER Intermediate High level Conversation and Composition courses: FRC/GER/SPA 323-324 and FRC/SPA 332/GER 331-332; and one Advanced Low FRC/GER/SPA Elective. 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 DMLLC pre-approval, such as courses in PSC, LAS, IR, HIST, or HON.

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MODERN LANGUAGES, LITERATURES AND CULTURES

2015 – 2017 MODERN LANGUAGES, LITERATURES AND CULTURAL COURSES

ARBC 103-104 Introductory Arabic **6 credits**

Reading, writing, listening and speaking. Introduction to Arabic culture. Course aim is for almost exclusive use of Arabic in class. Prerequisite for ARBC 104: C or better in ARBC 103. ARBC 103 *Fall*, ARBC 104 *Spring*

ARBC 215-217 Advanced-Introductory Arabic **6 credits**

Continued development in writing, listening, speaking and especially reading Arabic literary and cultural material. Comprehensive grammar review. Continued aim of almost exclusive use of Arabic in class. Prerequisites: C or better in ARBC 104 and ARBC 215. ARBC 215 *Fall*, ARBC 217 *Spring*

ARBC 323-324 Intermediate Arabic **6 credits**

This course is an intermediate level course for all students who have completed 12 credits of Arabic language or an equivalent of 12 credits from another institution. The focus of the course is on all four linguistic skills. Also emphasized is the cultural component. Prerequisite: C or better in Arabic 217 and 323. ARBC 323 *Fall*, and ARBC 324 *Spring*

ASL 103 American Sign Language I **3 credits**

Introduction to American Sign Language (ASL), its structure, major grammatical features and language functions. Vocabulary acquisition. Captioning and telecommunication devices. Deaf cultural information. Deaf co-teacher and deaf consultants. Language lab required (ASL 299) *Fall*

ASL 104 American Sign Language II **3 credits**

Builds on basic American Sign Language (ASL) grammar and conversational skills. Increases expressive/receptive fluency. Linguistic and cultural ASL concepts are expanded and deaf traditions studied. Deaf co-teacher and deaf consultants. Language lab required (ASL 299). Prerequisite: ASL 103. *Spring*

ASL 215 American Sign Language **3 credits**

In-depth history of American Sign Language. Cultural behaviors of deaf persons. Enhance sign language vocabulary. Ongoing development of language skills needed to explain ideas or concepts. Expand the ability to translate written text into American Sign Language. Broaden the use of classifiers. (No lab) *Fall*

ASL 217 American Sign Language **3 credits**

Continue to develop conversational fluency with deaf persons. Basic ASL story telling techniques. Role shifting and spatial agreement. Sequencing the use of appropriate classifiers. Presentation of specific narratives. Attend activities at the School for the Deaf. Contributions/roles of deaf individuals. (No lab). *Spring*

CHI 103-104 Introductory Chinese **6 credits**

Reading, writing, listening and speaking. Introduction to Chinese culture. Course aim is for almost exclusive use of Chinese in class. Prerequisite for CHI 104: C or better in CHI 103. CHI 103 *Fall*, CHI 104 *Spring*

CHI 215-217 Advanced-Introductory Chinese **6 credits**

Continued development in writing, listening, speaking and especially reading Chinese literary and cultural material. Comprehensive grammar review. Continued aim of almost exclusive use of Chinese in class. Prerequisites for CHI 215: C or better in CHI 104. CHI 215 *Fall*, CHI 217 *Spring*

FRC 103-104 Introductory French **6 credits**

Reading, writing, listening and speaking. Introduction to French and francophone cultures. Almost exclusive use of French in class. Prerequisite for 104: Grade of C or better in FRC 103. FRC 103 *Fall*, FRC 104 *Spring*

FRC 215-217 Intermediate French **6 credits**

These courses are 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. FRC 217 focuses on French Composition. Exclusive use of French in class. Prerequisites for FRC 215: C or better in FRC 104 or two or three years of high school French. Prerequisite for FRC 217: C or better in FRC 215. FRC 215 *Fall*, FRC 217 *Spring*

FRC 300 Intermediate Internship in France **3 credits**

Comparative study of a designated aspect of popular culture in France. For students who have not yet completed FRC 217. Prerequisite: Permission of chair.

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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: C or better in FRC 217. (Oral Communication Attribute) *Fall*

FRC 324 Topics in Conversation II **3 credits**

A continuation of FRC 323. Exclusive use of French in class. Prerequisite: C or better in FRC 323. (Oral Communication Attribute) *Spring*

FRC 332 Substance and Style: Effective Writing in French II **3 credits**

Distinguishing and producing effective writing of different types: essay, narrative, description, self-portrait, report, curriculum vitae, and correspondence. Exclusive use of French in class. Prerequisite: C or better in FRC 217. *Spring*

FRC 351 Junior French Seminar and Special Topics **3 credits**

Intensive analysis of selected literary, cultural, and historical works. Research paper required. Exclusive use of French in class. Prerequisite: C or better in FRC 324 and FRC 332.

FRC 400 Advanced Internship in France **3 credits**

Comparative study of a designated aspect of culture in France. Prerequisite: C or better in FRC 324 and 332 or permission of chair.

FRC 433 Survey of French and Francophone Literature **3 credits**

Selected readings of literary works from France and the Francophone world. Exclusive use of French in class. Prerequisite for FRC 433: C or better in FRC 324 and 332 or permission of chair. Prerequisite for FRC 434: C or better in FRC 433. (Field 3 Global Awareness Attribute) *Spring*

FRC 437 French and Francophone History and Culture Through Film I **3 credits**

Via feature-length films and documentaries, the history and culture of France and the Francophone world are explored. An emphasis is placed on how France's and the Francophone world's history and culture impact its current policies on international relations. Exclusive use of French in class. Prerequisite for FRC 437: C or better in FRC 324 and 332. (Field 3 Global Awareness Attribute)

FRC 439 French and Francophone History and Culture Through Film II **3 credits**

A continuation of FRC 437. Via feature-length films and documentaries, selected topics in contemporary issues of French and Francophone societies are explored. Exclusive use of French in class. Prerequisite for FRC 439: C or better in FRC 437. (Field 3 Global Awareness Attribute)

FRC 452 Tour de l'Amérique du Nord: Following the French in North America **3 credits**

Exploration of the rich history of the French in North America from the time of Nouvelle France, La Guerre de la Conquête and Le Grand Dérangement (the uprooting of the Acadian People) to the present day reemergence of language reacquisition among the multiple Franco-American communities in the United States. Prerequisite for FRC 452: C or better in FRC 323-324 and 332. (Field 3 Global Awareness Attribute)

FRC 453 War and Memory **3 credits**

Exploration of the events of World War II and the Occupation of France and their major role in the cultural and economic forces at work in contemporary France. Students will discuss particularly the mentality and demeanor of the French, the permanent and evolving traits of French society and the grounding of French culture. Prerequisite for FRC 453: C or better in FRC 323-324 and 332. (Global Awareness Attribute)

FRC 454 Héritages Francophones **3 credits**

Examination of the Francophone cultures in the United States and Canada. The communities explored include descendants of Acadians in the St. John Valley of Maine and the maritime provinces of Canada; the Cajun populations of Louisiana; the Haitian community in Miami; and the immigrants from Africa, Asia, and Europe. Prerequisite for FRC 454: C or better in FRC 323-324 and 332.

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FRC 499 Independent Study **3 credits**
Prerequisite: Permission of chair.

GER 103-104 Introductory German **6 credits**
Reading, writing, listening, and speaking. Introduction to German culture. Almost exclusive use of German in class. Prerequisite for GER 104: C or better in GER 103. GER 103 *Fall*, GER 104 *Spring*

GER 215-216 Intermediate German **6 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 German culture. Exclusive use of German in class. Prerequisites for GER 215: C or better in GER 104 or two or three years of high school German. Prerequisite for GER 216: C or better in GER 215 or permission of chair. GER 215 *Fall*, GER 216 *Spring*

GER 323 Topics in Conversation I **3 credits**
Contemporary communication skills emphasized in general exploration of contemporary culture of the German-speaking world. Exclusive use of German in class. Phonetics may be included. Prerequisite for German 323: C or better in GER 216 or four years of high school German. (Oral Communication Attribute) *Fall*

GER 324 Topics in Conversation II **3 credits**
A continuation of GER 323. Exclusive use of German in class. Language lab required. Prerequisite: C or better in GER 323 or permission of chair. (Oral Communication Attribute) *Spring*

GER 331 Substance and Style: Effective Writing in German I **3 credits**
Distinguishing and producing effective writing of different types: essay, correspondence, description, report. Exclusive use of German in class. Prerequisite: C or better in GER 216. *Fall*

GER 332 Substance and Style: Effective Writing in German II **3 credits**
A continuation of GER 331. Exclusive use of German in class. Prerequisite: C or better in GER 331. *Spring*

GER 341-342 Advanced German for Business I/ II **6 credits**
Advanced aural/oral and writing skills needed for working in a German speaking environment. Practical situations, technical vocabulary, and correspondence highlighted. Preparation for Wirtschaftsdeutsch International Examination. Exclusive use of German in class. Prerequisite for GER 341: C or better in GER 324 and 332. Prerequisite for GER 342: C or better in GER 341. GER 341 *Fall*, GER 342 *Spring*

GER 400 German Internship **3 credits**
Qualified students are placed in jobs or service programs where they will use and perfect language skills. Prerequisite: Permission of chair.

GER 441 The Young Generation and Civil Courage — 1848 to today **3 credits**
A detailed look at Germany's young generation between revolutionary and nationalistic attitudes, between resistance to and acceptance of the political: 1848 – 1871 – 1914 – 1939 – 1945 – 1957 – 1968 – 1989

GER 443 Pioneers, Paragons, and Visionaries **3 credits**
A close look at 50 Germans of importance whose significance is barely known but without whose impact on the world our lives today and our future lives would be less rich.

GER 453 German Literature after 1945 **3 credit**
A thorough inquiry into aspects of literary life in both parts of Germany before and after 1990. Reflection on the attempts by East and West German authors to distance themselves from and cope with the experience of the literature of the NAZI era.

GER 457 German Theater — From its Beginnings to Today **3 credits**
A thorough study of German Theatre between the 16th and the 21st centuries — between religious drama and bourgeois theatre, between "nation" and "self", between search for and loss of one's identity.

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GER 465 1968 in the European Context 3 credits

A comparison between the two major student movements in Europe, France and Germany, and its enduring impact within the political spectrum and beyond – Daniel Cohn-Bendit and Rudi Dutschke, the Green Party and the Red Army Faction terrorists.

GER 475 The History of German Film since Weimar 3 credits

A close look at the cinema of Weimar (UFA), cinema as propaganda machine under Hitler, West-Germany's cinema of restoration and the manifesto of Oberhausen, East-Germany's multi-faceted DEFA film-making, and at the trends of post-unification cinema within Europe.

ITA 103-104 Introductory Italian 6 credits

Reading, writing, listening and speaking. Introduction to Italian culture. Course aim is for almost exclusive use of Italian in class. Prerequisite for ITA 104: C or better in ITA 103 or permission of chair. ITA 103 *Fall*, ITA 104 *Spring*

ITA 215-217 Advanced-Introductory Italian 6 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. Prerequisites for ITA 215: C or better in ITA 104. ITA 215 *Fall*, ITA 217 *Spring*

POL 102 Survival Polish 1 credit

Designed specifically for participants in the Campus Ministry annual trip to Żmija, Poland. The goals for the course are directly related to the environment in which students work: summer camp for children. *Spring*

PORT 103-104 Brazilian Portuguese 6 credits

The main purpose of this course is to learn basic Brazilian Portuguese language skills through meaningful conversation and writing exercises in the classroom, to practice speaking and to enjoy learning about the Brazilian culture and people. Prerequisite for PORT 104: C or better in PORT 103. PORT 103 *Fall*, PORT 104 *Spring*

SPA 103-104 Introductory Spanish 6 credits

Reading, writing, listening and speaking. Introduction to Hispanic culture. Almost exclusive use of Spanish in class. Prerequisite for SPA 104: C or better in SPA 103. SPA 103 *Fall*, SPA 104 *Fall/Spring*

SPA 215-217 Intermediate Spanish 6 credits

These two courses are designed as a thorough review of grammatical structures. Also emphasized is the building of vocabulary, increasing competence in the four linguistic skills and gaining an overview of Hispanic cultures. SPA 217 focuses on Spanish Composition. Exclusive use of Spanish in class. Prerequisite for SPA 215: C or better in SPA 104 or two or three years of high school Spanish. Prerequisite for SPA 217: C or better in SPA 215. SPA 215 *Fall/Spring*, SPA 217 *Fall/Spring*

SPA 323 Topics in Conversation I: Peninsular Culture and Civilization 3 credits

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 via Skype (Dual Immersion). Prerequisite: C or better in SPA 217. (Oral Communication Attribute) *Fall*

SPA 324 Topics in Conversation II: Latin American Culture and Civilization 3 credits

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: C or better in SPA 217. (Oral Communication Attribute) *Spring*

SPA 332 Advanced Composition 3 credits

Distinguishing and producing effective writing of different types: description, narration, argumentation, and academic essay. Exclusive use of Spanish in class. Prerequisite: C or better in SPA 217. *Spring*

SPA 399 Seminar in Argentina 3 credits

Offered exclusively in Argentina during Winter Break for 3 weeks. Open to all majors in need of 200, 300 or 400-level SPA courses. Student register for SPA 399 in the Fall with permission of instructor; classes are conducted in Mar del Plata in January before the start of Spring semester; satisfies the Study Abroad Requirement. Pre-requisite: B or better in SPA 104 or above.

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MODERN LANGUAGES, LITERATURES AND CULTURES

SPA 400 Spanish Internship 3 credits
Qualified students are placed in jobs or service programs where they will use and perfect language skills. Prerequisite: Permission of chair

SPA 403 Spanish for Medical Professions 3 credits
Offered exclusively in Costa Rica during the summer for 5 weeks. In conjunction with an internship for additional 3 credits. Prerequisite: Grade of C or better in at least one 300 level course.

SPA 420 Spanish Contemporary Essay 3 credits
An examination of cultural themes (identities, stereotypes, customs and traditions) in the essayist work of the best contemporary Spanish writers: Lucía Etxebarria, 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. Prerequisite: C or better in two of the following courses: SPA 323, SPA 324, SPA 332. (Field 3)

SPA 433 La Telenovela: The Soap Opera in Latin America 3 credits
Explores the history of Soap Operas/Telenovelas in Latin America and their importance beyond entertainment. Discover how telenovelas function as public service announcements about health and civil rights, and how they tackle issues of gender equality, sexuality, classism, and racism. Exclusive use of Spanish in class. Prerequisite: C or better in two of the following courses: SPA 323, SPA 324, SPA 332. (Field 3)

SPA 436 Detective Fiction Murderous Seduction 3 credits
Explores the detective novel and film in Spanish and Latin American interpretations focusing on socio-political & 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. Prerequisite: C or better in two of the following courses: SPA 323, SPA 324, SPA 332. (Field 3)

SPA 450 Spanish through the Media 3 credits
This course will give you the opportunity to engage with the Spanish-speaking media and to explore current issues relevant to Spain, while building up your vocabulary and your overall command of the language. Exclusive use of Spanish in class. Prerequisite: C or better in two of the following courses: SPA 323, SPA 324, SPA 332. (Field 3)

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. Prerequisite: C or better in SPA 323, SPA 324, SPA 332. (Field 3)

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. Prerequisite: C or better in three of the following courses: SPA 323, SPA 324, SPA 332. (Field 3 Global Awareness Attribute.)

SPA 456: Cuban Cinema of the Revolution 3 credits
Offered exclusively in Cuba, 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. Prerequisite: C or better in SPA 323, SPA 324, SPA 332. (Field 3)

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MODERN LANGUAGES, LITERATURES AND CULTURES

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, 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. Prerequisite: C or better in SPA 323, SPA 324, SPA 332. (Field 3)

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. Prerequisite: C or better in SPA 323, SPA 324, SPA 332. (Field 3)

SPA 499 Independent Study 3 credits

Prerequisite: Permission of chair.

PROGRAM OF STUDY PHILOSOPHY

PHILOSOPHY

Chair: Michael Forest, 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 on the Philosophy department, please visit our website at <http://www.canisius.edu/philosophy/>

Student Learning Goals

Upon successfully completing a program of philosophy instruction, each philosophy graduate will have: Acquired a broad knowledge of major figures, branches, and terminologies in western philosophy. Acquired a capacity for thinking critically and for effectively assessing arguments. Become information literate as this applies to philosophical study and research.

Learning Objectives

For learning goals and objectives please visit our website at <http://www.canisius.edu/philosophy/learning-goals-objectives/>

Qualifications

Students must maintain an overall 2.0 GPA in their undergraduate studies and a 2.0 average in their philosophy programs to graduate with a degree in Philosophy. All students must complete a minimum of 120 credit hours to graduate, with at least 30 hours from philosophy courses.

Advisement

All philosophy students have a philosophy professor as an adviser. Each philosophy student should contact the department directly to consult with his/her department adviser. All philosophy majors should work closely with their advisers in choosing major courses, developing their entire academic program, discussing career expectations, and planning co-curricular or supplemental academic experiences.

PROGRAM OF STUDY
PHILOSOPHY

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

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 two major programs that maintain intellectual and academic rigor while promoting the mission to educate for others with attention to the principle of *cura personalis*. Each 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, each major curriculum requires one course in study and analysis of argumentation and two courses in the study of ethics, one of which is theoretical.

Ignatian Scholars Philosophy Curriculum

This curriculum prepares scholars specifically for advanced study in philosophy and consists of 12 courses (36 credit hours) beyond PHI 101.

Course	Title	Credits
PHI 225	Logic	3
PHI 301	Ancient Philosophy	3
PHI 302	Medieval Philosophy	3
Modern Philosophy	(1 Course) At least one from the following: PHI 303 - Early Modern Philosophy PHI 304 - 19 th Century Philosophy	3
Contemporary Philosophy	(1 Course) And at least one more from the following: PHI 305 Contemporary Continental Philosophy PHI 306 Contemporary Analytic Philosophy	3
PHI 451	Senior Thesis	3
	One Theory of Ethics Course: Choose among PHI 240, PHI 241, PHI 251, PHI 252, PHI 261	3
	One Applied Ethics Course: Choose among PHI 242, PHI 243, PHI 244, PHI 245, PHI 246, PHI 247, PHI 379	3
	Philosophy Elective PHI 400 level	3
	Philosophy Elective	3
	Philosophy Elective	3
	Philosophy Elective	3

PROGRAM OF STUDY
PHILOSOPHY

Hypatian Scholars Philosophy Curriculum

This curriculum prepares scholars for advanced study in disciplines other than philosophy and consists of 10 courses (30 credit hours) beyond PHI 101.

Course	Title	Credits
PHI 225	Logic	3
PHI 301	Ancient Philosophy	3
PHI 302	Medieval Philosophy	3
Modern Philosophy PHI 303 or PHI 304	At least one from the following: Early Modern Philosophy or 19th Century Philosophy	3
Contemporary Philosophy PHI 305 or PHI 306	And at least one more from the following: Contemporary Continental Philosophy or Contemporary Analytical Philosophy	3
	Philosophy Elective PHI 400 level	3
	Philosophy Elective Choose among PHI 240, PHI 241, PHI 251, PHI 252, PHI 261	3
	Philosophy Elective Choose among PHI 242, PHI 243, PHI 244, PHI 245, PHI 246, PHI 247, PHI 379	3

**Curricular Components of a Philosophy Minor
 Philosophic Associates**

A minor in philosophy consists of five (5) courses at middle and upper levels of study that might complement another major or provide personal intellectual satisfaction.

Course	Credits
One course from among PHI 301, 302	3
One course from among PHI 303, 304, 305, 306	3
Philosophy Elective	3
Philosophy Elective	3
Philosophy Elective	3

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. All philosophy majors and minors are members of the Undergraduate Philosophy Association. Membership enables philosophy students to participate in department activities, such as reviewing semester course offerings and considering department policies that affect their undergraduate careers.

PROGRAM OF STUDY PHILOSOPHY

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.

Fall	Spring
Freshman	Freshman
FYS 101 PHI 101 Core Field 3 Free Elective Free Elective	ENG 101 RST 101 PHI 225 Logic (Core Field 2) Core Field 4 Free Elective
Sophomore	Sophomore
PHI History Component PHI Ethics Theory Core Field 1 Free Elective Free Elective	PHI History Component PHI Applied Ethics Core Field 5 Free Elective Free Elective
Junior	Junior
PHI History Component PHI Elective Core Field 6 Free Elective Free Elective Free Elective	PHI History Component PHI 400 Elective Core Field 7 Free Elective Free Elective Free Elective
Senior	Senior
PHI Elective Free Elective Free Elective Free Elective Core Capstone	PHI Elective PHI 451 Free Elective Free Elective Free Elective

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a second major. The decision 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, a student must complete the appropriate dual major request form and secure the signature of each department chair and the appropriate associate dean.

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 arrange 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.

2015-2017 PHILOSOPHY 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 200 Level Courses **3 credits**

PHI 200 level courses are all Core Curriculum Field 2 courses that cover a wide range of topics to enrich a sense of the importance and relevance of philosophy. Each course broadens exposure to issues and deepens appreciation of philosophic analysis. Many PHI 200 courses have a Core Attribute attached – Ethics, Justice, Diversity, or Global Awareness. At least one PHI 200 level course is a prerequisite for upper level PHI courses.

PROGRAM OF STUDY
PHILOSOPHY

PHI 201 Philosophy of the Person 3 credits
A study of various notions of person, human nature, and the relationship between persons and their natural and social environments. (Field 2)

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. (Field 2)

PHI 221 Critical Thinking 3 credits
A study and exercise of forming good judgments for making decisions and for solving problems, considering evidence, context, relevant criteria and theories of argument. (Field 2)

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. (Field 2)

PHI 231 Thinking, Knowing, and Believing 3 credits
A study of epistemology, treating concepts and problems of such topics as sense perception, distinguishing knowledge and belief, the roles of necessity, universality, contradiction, and truth in knowing. (Field 2)

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. (Field 2, 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. (Field 2, Ethics)

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. (Field 2, Ethics)

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. (Field 2, Ethics)

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. (Field 2, Ethics)

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. (Field 2, Ethics)

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. (Field 2, Ethics)

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. (Field 2, Ethics)

PHI 251 Love, Friendship and Moral Life 3 credits
A philosophical study of three basic types of love – (1) *Eros* or erotic love, (2) *Philia* or friendly love, (3) *Agape* or universal love – and the moral questions that arise when considering and comparing these types of love. (Field 2, Ethics)

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. (Field 2, Ethics)

PROGRAM OF STUDY PHILOSOPHY

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. (Field 2, Justice)

PHI 267 Catholic Social Thought **3 credits**

A study of the legacy of Catholic social teaching from official papal encyclicals of Leo XIII to the present, from unofficial vehicles of independent social thinkers, and from social forces such as labor unions, journals, political parties, and spiritual social justice movements. (Field 2, Justice)

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. (Field 2, 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. (Field 2, 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. (Field 2, 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. (Field 2, Justice)

PHI 285 African American Philosophy **3 credits**

A study of philosophical trends within the American experience with attention to the contributions of prominent African American philosophers and social activists. (Field 2)

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. (Field 2, Justice)

PHI 291 Philosophy of Art and Beauty **3 credits**

A study of various approaches to thinking philosophically about art and beauty, with special emphasis on the historical variety of aesthetic theories.

PHI 300-Level Courses

PHI 300 level courses treat issues with greater attention to philosophic analysis and argumentation and expect students to demonstrate deeper capacity to compare and contrast the reasoning of different philosophers on a topic or theme. These courses are consistently more specialized and focus examination on primary texts with special attention to identify and extract the principles and premises underlying a philosopher's argumentation and then to reconstruct its chain of reasoning. At least two PHI 300 level courses are prerequisite for PHI 400 courses and senior thesis experiences.

SERIES IN HISTORY OF PHILOSOPHY

Series I

PHI 301 Ancient Philosophy **3 credits**

An examination of principal trends in ancient philosophy in the West from the Preplatonic Greeks through Plato and Aristotle to the beginning of the Medieval period.

PHI 302 Medieval Philosophy **3 credits**

An examination of principal trends in Medieval philosophy from St. Augustine in the fifth century to Renaissance philosophical explorations.

Series II

PHI 303 Early Modern Philosophy **3 credits**

An in-depth examination of major thinkers in the modern western philosophical tradition from Descartes to Kant, from the Renaissance to the Enlightenment.

PROGRAM OF STUDY

PHILOSOPHY

PHI 304 Nineteenth Century Philosophy 3 credits

A study of principal trends of 19th century European philosophy beginning with Kant and leading up to developments in early 20th century thinking.

PHI 305 Contemporary Continental Philosophy 3 credits

An examination of principle philosophic trends emerging in Europe after the 19th century, treating such traditions as phenomenology, critical theory, existentialism, feminism, post-structuralism, deconstruction, and postmodernism. (Justice)

PHI 306 Contemporary Analytic Philosophy 3 credits

An examination of principal philosophic trends in the Anglo-American world including logical positivism, linguistic analysis and ordinary language philosophy.

Additional PHI 300 Courses

PHI 316 Philosophy of Mind 3 credits

A study of the nature of mental phenomena and their connection to behavior, artificial intelligence, personal identity, the mind-body problem, the unity of consciousness, the problem of other minds, action, intention and the will.

PHI 317 Chinese Philosophy 3 credits

An exploration of classical Chinese philosophical traditions with special emphasis on the Confucian and Daoist traditions.

PHI 345 Justice and the Environment 3 credits

A study of various theories of justice as they relate to questions and problems that arise from the human use of and relationship to our natural environment.

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. (Ethics)

PHI 396 Philosophy and Literature 3 credits

A study of philosophical themes as expressed in literary texts to examine the propriety of literature as a medium for expressing philosophical ideas, and textual interpretation.

PHI 397 Philosophy and Film 3 credits

An examination of the basic issues in the philosophy of film, including its nature and social function as well as film's relation to authors, aesthetics, narratives, emotions and theories. (Global Awareness)

PHI 399 Core Capstone 3 credits

"Ethics, Justice, and the Problem of Poverty." 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.

PHI 400-level Seminars

The 400-level seminars in Philosophy engage students in using their analytic skills to synthesize, evaluate and critique philosophic discourse; especially to grasp the logical-philosophic consequences of foundational principles of human nature, being, nature and society. Students demonstrate mature understanding of philosophic analysis in scholarly papers, thesis or other appropriate projects. Typically the Department of Philosophy offers one 400-level seminar per year during the Spring semester. Seminar themes rotate and reflect the research expertise of the faculty member offering the seminar. Recent seminar themes include: "Seminar on Philosophy and Psychoanalysis," "Seminar on Ethics: The Virtues," and "Seminar on the American Pragmatist Philosophers."

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.

PROGRAM OF STUDY

PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

PHYSICAL EDUCATION

Chair: Peter M. Koehneke

Director: Clancy M. Seymour, Ed.D.

Introduction

The Physical Education major is a teacher certification program in physical education (K-grade 12). The department recommends that candidates interested in teaching obtain dual certification in physical education and health, but this major may be of interest for candidates only interested in teaching physical education.

Teacher Certification Options

The teacher preparation program strives to develop a liberally educated individual 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. Candidates pursuing the Physical Education Teacher Certification Option complete over 300 hours of practicum experiences in multiple courses (PED 311, PED 354, PED 360, PED 371, PED 380, PED 441, PED 441B Lab).

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 student teacher 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.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/phys-ed/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/phys-ed/dual-program/dual-learning-goals/>

Qualifications

Academic Criteria for Endorsement and Completion of Program:

- Cumulative GPA of 2.5 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 Physical Education majors are assigned an advisor and should contact the Department of Kinesiology directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY
PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

Major Courses

Course	Title	Credits
	Select two of the following three courses (203, 204, 207):	
PED 203	Net, Target, and Fitness Activities	3
PED 204	Invasion Games	3
PED 207	Dance and Gymnastics	3
	And these remaining courses:	
PED 305	Outdoor Curriculum and Cooperative Activities	3
PED 311	Movement Education and Elementary Activities	3
PED 351	Coaching Theory and Techniques	3
PED 354	Adapted Physical Education	3
PED 355	Disability Sports	3
PED 360	Human Growth and Motor Development	3
PED 371	Assessment in Physical Education	3
KIN 235	Kinesiology	3
KIN 494	Capstone for Kinesiology	3
BIO 114/L	Human Biology: An Introduction to Anatomy and Physiology	4
BIO 115/L	Musculoskeletal Anatomy and Physiology	4
HED 205	Wellness and Fitness	3
HED 321	Lifeguard, CPR, First Aid, WSI	3
HED 337	Exercise Principles and Applications	3
HED 361	Psychology of Sport and Mental Health	3
EDU 122	Technology in Education	3
EDU 250	Foundations of Education	3
SPE 341	Inclusive Strategies	3
PED 372	Seminar in Kinesiology	3
PED 380	Concepts in Teaching Sport Skills	3
PED 441	Teaching Methods of Physical Education	3
PED 441L	Teaching Practicum in Physical Education	0
PED 493	Student Teaching: PE/Health	12

Course	Title	Credits
EDU 495	Child Abuse Seminar	0
EDU 496	Violence Prevention Workshop	0
EDU 497	Dignity for All Students (DASA)	0
EDU 498	Student Teaching Seminar	0

Major Electives

Physical Education majors should consult their advisor for major electives.

Major Experiences

All students in the physical education 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 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 Course Considerations

HED 321 Lifeguard, CPR, First Aid requires a special course fee that is related to certification requirements. PED 351 and PED 354 have required service learning hours. PED 441 Lab must be taken in the last semester before student teaching. PED 311/PED 360 and PED 354/380 require 30 hour field experiences depending on the matriculation of the student. Transportation needed. Students must also achieve and maintain personal fitness by passing a physical fitness test. While foreign language is not required for graduation, secondary language proficiency must be demonstrated for New York State licensure. Physical Education majors should consult their advisor for additional course considerations.

PROGRAM OF STUDY
PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
BIO 114 and Lab	4	BIO 115 and Lab	4
EDU 122 or HED 115 or HED 220	3	EDU 122 or HED 115 or HED 220	3
HED 205 or Field 7	3	HED 205 or Field 7	3
FYS 101	3	ENG 101	3
PED 204 (Global) or PED 305	3	PED 203 or 207	3
Sophomore		Sophomore	
Field 3 or 4	3	Field 3 or 4	3
EDU 122 or HED 115 or HED 220	3	PED 311	3
HED 361 or HED 337	3	HED 361 or HED 337	3
KIN 235 or EDU 250/495/496	3	KIN 235 or EDU 250/495/496	3
PED 204 (Global) or PED 305	3	SPE 341	3
RST 101 or PHI 101	3	RST 101 or PHI 101	3
Junior		Junior	
Field 1 or 2 (Ethics)	3	Field 1 or 2 (Ethics)	3
HED 321	3	Elective	3
Elective	3	PED 371	3
PED 351	3	PED 372	3
PED 354	3	PED 355	3
		PED 380	3
Senior		Senior	
Elective	3	PED 493	12
PED 360	3	EDU 497	0
PED 441	3	EDU 498	3
PED 441 Lab	0		
KIN 494	3		

PROGRAM OF STUDY

PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

Dual Majors

Physical Education students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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

Physical Education students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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: Dr. Clancy Seymour serves as the Director of the Physical Education Teacher Education program.

Strength and Conditioning Minor

The Strength and Conditioning minor is common minor for 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 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.

Strength and Conditioning Minor Courses

Course	Title	Credits
BIO 114	Human Biology (Lab)	4
BIO 115	Musculoskeletal Anatomy (Lab)	4
KIN 235	Kinesiology	3
KIN 336	Physiology of Exercise	3
HED 337	Exercise Principles	3
ATH 373 or HED 115	Nutritional Issues for Athletic Trainers or Basic Nutrition	3
PED 365 or KIN 420	Principles and Philosophy of Coaching or Strength and Conditioning Applications	3

Note: Dr. Karl Kozlowski and Dr. Chuck Pelitera serve as advisors for the Strength and Conditioning minor program in the Department of Kinesiology.

PROGRAM OF STUDY
PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

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. The minor provides students with preparation Kinesiology courses have specific pre-requisites, which are stated in the course descriptions.

Coaching Minor Courses

Course	Title	Credits
PED 351	Theory and Techniques of Coaching	3
PED 365	Principles and Philosophy	3
HED 205 or KIN 337	Health and Wellness or Exercise Principles	3
HED 115	Basic Nutrition	3
HED 321 or KIN 170	First Aid/ CPR for Coaches or Emergency Care	3
PED 380	Concepts in Teaching Sports Skills	3
PED 498	Coaching Internship	0
Total		18

Note: Dr. Gregory Reeds serves as the advisor for the coaching minor program in the Department of Kinesiology.

PROGRAM OF STUDY

PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

PHYSICAL EDUCATION/HEALTH

Chair: Peter M. Koehneke

Director: Clancy M. Seymour, Ed.D.

Introduction

The teacher preparation program strives to develop a liberally educated individual 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. Candidates pursuing the Physical Education/Health Teacher Certification Option complete over 300 hours of practicum experiences in multiple courses (HED 325, HED 326, PED 311, PED 354, PED 360, PED 371, PED 380, PED 441, PED 441B Lab).

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 and the curriculum standards outlined for health education and health certification by the American Association for Health Education (AAHE). The teacher certification option culminates with a fourteen-week student teaching experience in the K-12 schools. Each student teacher 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.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/phys-ed/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/phys-ed/dual-program/dual-learning-goals/>

Qualifications

Academic Criteria for Endorsement and Completion of Program:

- Cumulative GPA of 2.5 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 Physical Education/Health majors should have an advisor and should contact the Department of Kinesiology directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY
PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

Major Courses

Course	Title	Credits
Physical Education Courses		
	Select two of the following three courses (203, 204, 207):	
PED 203	Net, Target, and Fitness Activities	3
PED 204	Invasion Games	3
PED 207	Dance and Gymnastics	3
	And these remaining courses:	
PED 305	Outdoor Curriculum and Cooperative Activities	3
PED 311	Movement Education and Elementary Activities	3
PED 351	Coaching Theory and Techniques	3
PED 354	Adapted Physical Education	3
PED 355	Disability Sports	3
PED 360	Human Growth and Motor Development	3
PED 371	Assessment in Physical Education	3
KIN 235	Kinesiology	3
KIN 494	Capstone in Kinesiology	3
Health Education Courses		
BIO 114/L	Human Biology: An Introduction to Anatomy and Physiology	4
BIO 115/L	Musculoskeletal Anatomy and Physiology	4
HED 115	Basic Nutrition	3
HED 205	Wellness and Fitness	3
HED 220	Healthy Behaviors	3
HED 321	Lifeguard, CPR, First Aid, WSI	3
HED 325	School Health	3
HED 326	Health Curriculum	3
HED 337	Exercise Principles	3
HED 361	Psychology of Sport and Mental Health	3
HED 425	Evolution of Disease and Illness	3
Pedagogical Core		
EDU 122	Technology in Education	3
EDU 250	Foundations of Education	3

Course	Title	Credits
PED 372	Seminar in Kinesiology	3
PED 380	Concepts in Teaching Sport Skills	3
SPE 341	Inclusive Strategies	3
PED 441	Teaching Methods of Physical Education	3
PED 441L	Teaching Practicum in Physical Education	0
PED 493	Student Teaching: PE/Health	12
EDU 495	Child Abuse Seminar	0
EDU 496	Violence Prevention Workshop	0
EDU 497	Dignity for All Students	0
EDU 498	Student Teaching Seminar	3

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 Course Considerations

ED 321 Lifeguard, CPR, First Aid requires a special course fee that is related to certification requirements. PED 351 and PED 354 have required service learning hours. PED 441 must be taken in the last semester before student teaching. PED 311 and PED 371 require 30 hour field experiences. Transportation needed. Students must also achieve and maintain personal fitness by passing a physical fitness test. While foreign language is not required for graduation, secondary language proficiency must be demonstrated for New York State licensure. Physical Education majors should consult their advisor for additional course considerations.

PROGRAM OF STUDY
PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
BIO 114 and Lab	4	BIO 115 and Lab	4
EDU 122 or HED 115 or HED 220	3	EDU 122 or HED 115 or HED 220	3
HED 205 or Field 7	3	HED 205 or Field 7	3
FYS 101	3	ENG 101	3
PED 204 (Global) or PED 305	3	PED 203 or 207	3
Sophomore		Sophomore	
Field 3 or 4	3	Field 3 or 4	3
EDU 122 or HED 115 or HED 220	3	PED 311	3
HED 361 or HED 337	3	HED 361 or HED 337	3
KIN 235 or EDU 250/495/496	3	KIN 235 or EDU 250/495/496	3
PED 204 (Global) or PED 305	3	SPE 341	3
RST 101 or PHI 101	3	RST 101 or PHI 101	3
Junior		Junior	
Field 1 or 2 (Ethics)	3	Field 1 or 2 (Ethics)	3
HED 321	3	HED 325	3
HED 425	3	PED 371	3
PED 351	3	PED 372	3
PED 354	3	PED 355	3
		PED 380	3
Senior		Senior	
HED 326	3	PED 493	12
PED 360	3	EDU 497	0
PED 441	3	EDU 498	3
PED 441 Lab	0		
KIN 494	3		

PROGRAM OF STUDY

PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

Dual Majors

Physical Education/Health students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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.

Note: Dr. Clancy Seymour serves as the Director for the Physical and Health Education Teacher Education Program.

Minors

Physical Education/Health students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

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. The minor provides students with preparation Kinesiology courses that have specific pre-requisites, which are stated in the course descriptions.

Coaching Minor Courses

Course	Title	Credits
PED 351	Theory and Techniques of Coaching	3
PED 365	Principles and Philosophy	3
HED 205 or KIN 337	Health and Wellness or Exercise Principles	3
HED 115	Basic Nutrition	3
HED 321 or KIN 170	First Aid/CPR for Coaches or Emergency Care	3
PED 380	Concepts in Teaching Sports Skills	3
PED 498	Coaching Internship	0

Note: Dr. Gregory Reeds serves as the advisor for the coaching minor program in the Department of Kinesiology.

PROGRAM OF STUDY

PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

PHYSICAL EDUCATION SPORT STUDIES

Chair: Peter M. Koehneke

Coordinator: Greg Reeds, Ed.D.

Introduction

The physical education major may wish to pursue a career other than teaching. Several options are available to prepare students for professional careers or graduate training. Students may obtain a bachelor of science degree in physical education, a bachelor of science degree in physical education with a minor in sport psychology, or a concentration in sport administration. In each program the candidate must combine the elected minor or concentration with the required major courses. The Physical Education Sport Studies degree does not lead to teacher certification. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/phys-ed/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/phys-ed/dual-program/dual-learning-goals/>

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Physical Education Sport Studies. All students must complete a minimum of 120 credit hours to graduate.

Advisement

Physical Education Sport Studies students should have an advisor in the major and should contact the Department of Kinesiology directly to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

Course	Title	Credits
SPMT 150	Introduction to Sports Management	3
HED 205	Wellness and Fitness	3
HED 220	Healthy Behaviors	3
KIN 235	Kinesiology	3
HED 337	Exercise Principles and Applications	3
KIN 350	Organization of Administration of Health and Wellness	3
PED 351	Coaching Theory and Techniques	3
HED 425	Disease and Illness	3
HED 361	Psychology of Sport and Mental Health	3
BIO 114/L	Human Biology: An Introduction to Anatomy and Physiology	4
BIO 115/L	Musculoskeletal Anatomy and Physiology	4
KIN 494	Capstone in Kineiology	3
	PE or Health Elective	3
	PE or Health Elective	3
	PE or Health Elective	3

Major Electives

Physical Education Sport Studies majors should consult their advisor for major electives.

PROGRAM OF STUDY
PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

Additional Course Considerations

Physical Education Sport Studies majors should consult their advisor for additional course considerations.

Fall	Credits	Spring	Credits
Freshman		Freshman	
SPMT 150	3	HED 220	3
BIO 114 and Lab	4	BIO 115 and Lab	4
RST 101	3	PHI 101	3
FYS 101	3	ENG 101	3
		Elective	3
Sophomore		Sophomore	
KIN 235	3	KIN 350	3
HED 205	3	Field 1	3
Field 7	3	Electives	9
Electives	6		
Junior		Junior	
HED 337	3	HED 361	3
PED 351	3	Field 3	3
Field 2	3	Electives	9
Senior		Senior	
HED 425	3	KIN 494	3
Field 4	3	Electives	12
Electives	9		

PROGRAM OF STUDY

PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

Dual Majors

Physical Education Sport Studies students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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

Physical Education Sport Studies students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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 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.

Sports Psychology Minor

Course	Title	Credits
PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 202	Experimental Psychology	3
PSY 318	Social Psychology	3
PSY 329	Leadership and Motivation	3
PSY 373	Behavior Modification	3
PED 498	Internship (Recommended but not required)	3

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. The minor provides students with preparation Kinesiology courses have specific pre-requisites, which are stated in the course descriptions.

PROGRAM OF STUDY
PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

Coaching Minor Courses

Course	Title	Credits
PED 351	Theory and Techniques of Coaching	3
PED 365	Principles and Philosophy	3
HED 205 or KIN 337	Health and Wellness or Exercise Principles	3
HED 115	Basic Nutrition	3
HED 321 or KIN 170	First Aid/ CPR for Coaches or Emergency Care	3
PED 380	Concepts in Teaching Sports Skills	3
PED 498	Coaching Internship	0

Note: Dr. Gregory Reeds serves as the advisor for the coaching minor program in the Department of Kinesiology and serves as the coordinator of the Physical Education Sport Studies program.

2015 – 2017 PHYSICAL EDUCATION COURSES

EDU for Teacher Education, HED for Health Education, PED for Physical Education, KIN for Kinesiology, SPE for Special Education

EDU 122 Technology in Education 3 credits

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. *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. *Fall/Spring*

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. *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 for childhood, childhood obesity and the development of a personal fitness program. *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. *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. *Fall*

PROGRAM OF STUDY

PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

HED 325 School Health 3 credits

Students will practice strategies and methodologies needed for effectively teaching health education. Students will participate in a field experience 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. Field experience required. *Spring*

HED 326 Health Curriculum 3 credits

Students explore the most prevalent health and safety issues of school-aged children and examine 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. *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. Prerequisites: BIO 114/L with a grade of C or above. *Fall/Spring*

HED 361 Psychology of Sport and Mental Health 3 credits

Psychological aspects of healthy living related to sports, exercise and lifestyle. Stress and relaxation techniques, controlled breathing and holistic benefits of health are discussed, leading to an improved quality of life for athletes. (Meets Field Knowledge V) *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. *Fall/Spring*

KIN 235 Kinesiology 3 credits

Scientific study of human movement, emphasizing the basic principles of musculoskeletal anatomy, neuromuscular physiology and biomechanics. Prerequisite: BIO 115 and lab with a grade of C or above. *Fall/Spring*

KIN 350 Organization and Administration of Health and Wellness 3 credits

Organization and administration of health and wellness programs. Basic theories and philosophies of administration, along with the duties, functions and processes as related to problems and practices in health and wellness facilities. *Fall*

KIN 494 Capstone in Kinesiology 3 credits

This seminar is a reflective course that is taken for students in the Department of Kinesiology. Students reflect on service excursions, review readings, debate related topics in kinesiology, and compose a final report on a topic in the profession laced with justice, diversity, ethical, and global issues *Fall/Spring*

PED 203 Net, Target and Fitness Activities 3 credits

Participation in selected net, target, and fitness activities. Students will develop a sub-skill analysis of the major skills within each sport, teaching progressions, lead-up games, informal/formal assessments of selected activities. Alternating *Spring (odd years i.e. 2017)*

PROGRAM OF STUDY

PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

PED 204 Invasion Games **3 credits**

Participation in selected games which invade a territory. Students will develop a sub-skill analysis of the major skills within each sport, teaching progressions, lead-up games, informal/formal assessments of selected activities. Alternating *Fall (odd years i.e. 2015)*

PED 207 Dance and Gymnastics **3 credits**

Participation in selected dance and gymnastics forms. Students will learn appropriate organization and teaching progressions for various forms of dance and gymnastics taught in the P-12 curricula. Alternating *Spring (even years i.e. 2016)*

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. Alternating *Fall (even years i.e. 2016)*

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. *Spring*

SPE 341 Inclusive Strategies **3 credits**

Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration to meet the diverse needs of learners. *Fall/Spring*

PED 351 Coaching Theory and Techniques **3 credits**

Principles of effective coaching, including the role of the coach, practice planning, leadership theory, sports psychology and teaching motor skills. Service Learning hours may be earned in this course. *Fall*

PED 354 Adapted Physical Education **3 credits**

Field-centered approach to development of physical-education programs for students with disabilities. Concurrent observation and participation in program for the disabled. Includes 10 hour non-credit lab working with special populations. Service Learning hours may be earned in this course. *Fall*

PED 355 Disability Sports **3 credits**

Identification of national and international sport and recreational opportunities for individuals with disabilities. Paralympics, Special Olympics, and other disability sport movements and sport classifications will be reviewed. Insight into the historical development of disability sports as well as the delivery of sport models in school and community settings will be included. *Spring*

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. *Fall*

PED 365 Principles and Philosophy of Coaching **3 credits.**

Examination of principles of effective coaching including the role of the coach, ethics and values clarification. Examines the interpersonal strategies leading to a productive coach-athlete relationship. *Spring*

PROGRAM OF STUDY

PHYSICAL EDUCATION, HEALTH, AND SPORT STUDIES

PED 371 Assessment in Physical Education **3 credits**

Lectures, laboratory, and field experience in the Physical Best Fitness program, Fitness gram, and integrating PE Metrics and the NYS PE Profile. Focus on the evaluation of the State standards and authentic assessments and NASPE guidelines. Certification fee required for this course. 30 hour field experience required. *Spring*

PED 372 Seminar in Kinesiology **3 credits**

Current issues in a variety of related topics. (Advanced Writing Attribute Designation.) *Spring*

PED 380 Concepts of Teaching Sport Skills **3 credits**

Normal developmental patterns of motor skills. How the human organism acquires movement proficiency in those skills. *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. Program Director Signature. *Fall*

PED 441L Teaching Practicum in Physical Education **0 credits**

Field experience concurrent with PED 441. Program Director Signature. *Fall/Spring*

PED 493 Student Teaching Physical Education/Health: Childhood and Adolescence **12 credits**

Seven-week student teaching experience in an elementary school, Grades 1-6, and in a high school, Grades 7-12, culminating in preparation for teacher certification. Grade: Pass/Fail. Prerequisites: Completion of all other course requirements and department approval, 2.5 GPA in all major courses. *Fall/Spring*.

Note: PED 493, EDU 497, and EDU 498 must be registered together during the student teaching semester. This will count as a full semester of three courses, 15 credit hours.

EDU 495 Child Abuse Seminar **0 credits**

Corequisite for EDU 250. Required for NYS Teacher Certification. *Fall/Spring*

EDU 496 Prevention of School Violence Seminar **0 credits**

Corequisite for EDU 250. Required for NYS Teacher Certification. *Fall/Spring*

Note: PED 493, EDU 495, EDU 496 must be registered together during the student teaching semester. This will count as a full semester of three courses, 12 credit hours.

EDU 497 Dignity for All Students (DASA) **0 credits**

Held during the Student Teaching Seminar. Required for NYS Teacher Certification. *Fall/Spring*

Note: PED 493, EDU 497, and EDU 498 must be registered together during the student teaching semester. This will count as a full semester of three courses, 15 credit hours.

EDU 498 Student Teaching Seminar **0 credits**

Held during the Student Teaching Seminar. Required for NYS Teacher Certification. *Fall/Spring*

Note: PED 493, EDU 497, and EDU 498 must be registered together during the student teaching semester. This will count as a full semester of three courses, 15 credit hours.

PED 498 Internship **3 credits**

Field-based experience in selected areas of physical education. Requires 120 clock hours. Prerequisite: Department chair permission. *Fall/Spring*

PED 499 Independent Study **3 credits**

Prerequisite: Department chair permission. *Fall/Spring*

PROGRAM OF STUDY PHYSICS

PHYSICS

Chair: Michael Wood, PhD

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.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/physics/index.dot>

Qualifications

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Physics. All students must complete a minimum of 120 credit hours to graduate. 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, 224, 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, 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. 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.

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/physics/learning-goals-objectives/>

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation.

PROGRAM OF STUDY

PHYSICS

Major Course Requirements: (18 courses)

Course	Title	Credits
PHY 107	Computer Programming for Science Majors	4
PHY 223-224	General Physics for Physical Science Majors	4-4
PHY 225	General Physics III	4
PHY 226	Basic Electronics	4
PHY 330	Electrodynamics, I	3
PHY 331	Electrodynamics, II	3
PHY 332	Statistical and Thermal Physics	3
PHY 335	Mathematics for Physics	4
PHY 350-351	Advanced Laboratory (1-1)	1-1
PHY 443	Classical Mechanics	3
PHY 445	Special Topics in Physics	1
PHY 446	Quantum Mechanics I	3
PHY 447	Quantum Mechanics II	3
PHY 498	Senior Project	1-3
CHM 111	General Chemistry	4
MAT 111-112	Calculus I and II	4-4
MAT 211	Calculus III	4
MAT 222	Differential Equations	4

Major Electives

Computer Science and Mathematics courses are highly recommended, particularly linear algebra.

Major Experiences

Physics majors 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. 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, Computer Science, and Digital Media Arts Departments. Routinely, students present posters at local, statewide, and national conferences. Past students have conducted 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.

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.

PROGRAM OF STUDY

PHYSICS

Recommended Semester Schedule for Major Course Requirements

Fall	Spring
Freshman	Freshman
CHM 111 CSC 107 MAT 111	*Science Elective MAT 112 PHY 223
Sophomore	Sophomore
MAT 211 PHY 224	MAT 222 PHY 225 PHY 226
Junior/Senior	Junior/Senior
PHY 330 PHY 350 (1) PHY 335	PHY 331 PHY 351 (1)
Senior/Junior	Senior/Junior
PHY 336 PHY 332 PHY 443 PHY 445 (1)	PHY 447 PHY 499

*Science Elective to be chosen from BIO 111, CHM 112, CSC 212, 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.

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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.

Dual majors in Physics and Computer Science, or Physics and Mathematics are common and offer interesting career options.

Minors

Physics Minor: The physics minor requires seven courses, which are to be distributed as follows.

Course	Title
Four Required Courses	
PHY 223	General Physics I
PHY 224	General Physics II (8)
PHY 225	General Physics III
MAT 211	Calculus III
Three courses selected from the following two groups. At least one of these three must be selected from Group I.	
Group I	
PHY 330	Electrodynamics, I
PHY 331	Electrodynamics, II
PHY 332	Statistical and Thermal Physics
PHY 443	Classical Mechanics
PHY 446	Quantum Mechanics I
Note: (i) PHY 331 requires PHY 330 as a prerequisite. (ii) PHY 446 is required for PHY 447, (iii) PHY 335 is highly recommended as a co-requisite for PHY 330, and (iv) PHY 443 requires MAT 222 as a prerequisite.	
Group II	
PHY 226	Basic Electronics
Two of PHY 350, 351, 445 Advanced Lab (2)	
MAT 222	Differential Equations
PHY 335	Mathematics for Physics
PHY 447	Quantum Mechanics II
CHM 301	Classical Physical Chemistry
Note: 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.

PROGRAM OF STUDY

PHYSICS

2015 – 2017 PHYSICS COURSES

PHY 107 Computer Programming for Science 3 credits

Introduction to computer programming with the C/C++ and Matlab-equivalent languages. Examples and applications for science. *Fall*

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. (Field 6) *Fall*

PHY 131 Earthquakes: Seismology and Society 3 credits

The science behind earthquakes: causes, locations, frequency and measurement; affects on geography, human structures and society. (Field 6, Global Awareness) *Fall*

PHY 133 Dinosaurs 3 credits

An introduction to dinosaurs and their world through an examination of their anatomy, evolution, phylogeny, behavior, metabolism and the cause of their extinction. Exploration of geological concepts such as uniformitarianism, stratigraphy, sedimentation, fossilization and taphonomy will help to explain how this knowledge was extracted from the rocks. (Field 6) *Spring*

PHY 201 and 201L General Physics I, with Lab 3+1 credits

General Physics for biological-science students. Mechanics of rigid bodies, mechanics of fluids, thermal energy and thermodynamics. Prerequisite: MAT 111 or 110. Lab required (i.e., 201L) with lecture (201). (Field 6) *Fall*

PHY 202 and 202L General Physics II, with Lab 3+1 credits

General Physics for biological-science students. Electricity and magnetism, geometrical and physical optics. Prerequisite: PHY 201 with a grade of C- or higher. Lab required (i.e., 202L) with lecture (202). (Field 6) *Spring*

PHY 223 and 223L General Physics for Physical Science Majors I, with Lab 3+1 credits

Calculus-based general physics. Mechanics of rigid bodies. Lab required (i.e., 223L) with lecture (223). Prerequisite: MAT 111 or 110. *Spring*

PHY 224 and 224L General Physics for Physical Science Majors II, with Lab 3+1 credits

Calculus-based general physics. Electricity and magnetism, geometrical and physical optics. Prerequisite: MAT 112 and PHY 223 with a grade of C- or higher. Lab required (i.e., 224L) with lecture (224). *Fall*

PHY 225 and 225L General Physics for Physical Science Majors III, with Lab 3+1 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 and PHY 224 with a grade of C- or higher. Lab required (i.e., 225L) with lecture (225). *Spring*

PHY 226-226L Basic Electronics 3+1 credits

Circuit analysis, power supplies, semiconductor physics, operational amplifiers, digital electronics. Integrated circuit techniques. Includes laboratory work each week. Lab required Prerequisite: A grade of C- or higher in PHY 224 is required. *Spring*

PHY 301 Optics 3 credits

Geometric optics, interference, diffraction, fiber optics, laser system design, holographic metrology and non-linear optical phenomena. Prerequisites: MAT 222 and PHY 224. *Offered on demand*

PHY 330 Electrodynamics, I 3 credits

Static and time-varying classical electric and magnetic fields in free-space and matter. Prerequisite: PHY 224. Prior completion of or concurrent registration for PHY 335 is strongly encouraged. *Fall odd-numbered years – 2 year cycle*

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. *Spring even-numbered years – 2 year cycle*

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. *Fall even-numbered years – 2 year cycle*

PROGRAM OF STUDY PHYSICS

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 consent of instructor. *Fall odd-numbered years – 2 year cycle*

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. (Carries Advanced Writing Attribute) *Fall – 2 year cycle*

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. (Carries Oral Communication Attribute) *Fall – 2-year cycle opposite PHY 350*

PHY 360 Scientific Modeling 3 credits

An introduction to the use of computer models to develop understanding in a scientific context. This course is intended for students in any scientific or mathematical discipline, and focuses on the principles involved in using and interpreting computer models. The course is divided into three main sections: dynamical modeling, structural modeling and computer-based statistical methods. Problems will be drawn from biology, biochemistry, chemistry, geology and physics. Prerequisites: MAT 111 and a one-year introductory science sequence (in computer science, chemistry, biology or physics). *Offered on demand*

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. Prerequisites: PHY 224, MAT 222. *Fall even-numbered years – 2 year cycle*

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. Enrollment is restricted to physics majors and minors with senior status, and by permission of instructor. *Spring 2-year cycle*

PHY 446 Quantum Mechanics I 3 credits

Experimental basis of quantum mechanics, state functions, operators. Review of linear algebra techniques and introduction of the Dirac notation. Prerequisites: PHY 225, MAT 222. *Fall even-numbered years – 2 year cycle*

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. *Spring odd-numbered years – 2 year cycle*

PHY 449 Nuclear Physics Lab 1 credit

Introduction to experimental nuclear physics. Experiments study nuclear instrumentation, characteristics of radiation and nuclear spectra. Prerequisite: PHY 225. *Offered on demand*

PHY 498 Senior Project 1 3 credits

A one-semester research project done under the supervision of a faculty member. Prerequisite: Senior standing in physics and permission of department chair. *Spring*

PHY 499 Independent Study 3 credits

Prerequisite: Permission of department chair. *Fall/Spring*

PROGRAM OF STUDY
POLITICAL SCIENCE

POLITICAL SCIENCE

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 <http://www.canisius.edu/political-science/index.dot>

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 National Security Council (PSC 346), Political Campaigns (PSC 236) and the European Union (PSC 355);
- 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.

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/political-science/learning-goals-objectives/>

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 PSC 217. Students must also pass PSC 401. In addition, students must maintain a 2.0 overall average to graduate with a degree in Political Science. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All students must have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. All majors should work closely with their advisor in discussing career aspirations and options, additional majors or minors, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and any major or minor requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY POLITICAL SCIENCE

Political Science Curriculum

Major course requirements (12 courses)

Course	Title	Credits
Required course (7 courses)		
PSC 103	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 217	Research Methods	3
PSC 401	Capstone (see course listings for details)	1

Major Electives (five courses)

Five Political Science courses, including at least two at the 300/400 level. 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, 104, 140, and 150 may be taken in any sequence. It is strongly recommended that these four courses, along with PSC 111 and 217, be completed before the beginning of the junior year.

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 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.

PROGRAM OF STUDY
POLITICAL SCIENCE

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
PSC 103 PSC 150	3 3	PSC 104 PSC 140	3 3
Sophomore		Sophomore	
PSC 111 PSC Major Elective	3	PSC 217 PSC Major Elective (300/400 level)	3
Junior		Junior	
PSC Major Elective (300/400 level)		PSC Major Elective	
Senior		Senior	
PSC Major Elective		PSC 401	1

Dual Majors

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.

In some cases, additional coursework is required beyond the 120 credits needed for graduating. Students planning dual or triple degrees should consult with their academic advisor in the Political Science Department and the chair or director of each department or program involved.

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

The Political Science minor, for non-majors only, provides an introduction to an overview of the discipline:

Course	Title	Credits
PSC 103	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 215, 237, 245, 334, 345 or 360	Public Policy	3
PSC 224, 225, 325 or 335	American Political Institutions and Behavior	3
Total (7 courses)		21

PROGRAM OF STUDY

POLITICAL SCIENCE

The Law and Public Policy minor, for both majors and non-majors, focuses on the relationship between the legal system and public policy (8 courses – 24 credits)

Course	Title	Credits
ECO 101	Macroeconomics	3
ECO 401	Public Finance or approved substitute	3
PSC 103	American Constitution	3
PSC 215	National Issues and Public Policy	3
PSC 245	American Foreign Policy	3
PSC 345	Transnational Crime after 9/11	3
PSC 320	American Constitutional Law I	3
PSC 321 or PSC 420	American Constitutional Law II or Constitution, War on Terror and Civil Liberties	3

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.

Political Science and Business

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). This consists of MGT 201, MKT 201, MGT 325, MGT 370 and two Business Management electives. Many Political Science students will also benefit by taking macroeconomics and microeconomics (ECO 101 and 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

PROGRAM OF STUDY POLITICAL SCIENCE

2015-2017 POLITICAL SCIENCE COURSES

PSC 103 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 political system. (Field 5) *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. (Field 5) *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. (Field 4, Justice Attribute) *Fall/Spring*

PSC 140 International Relations 3 credits

Introduces paradigms of world politics. International security, political economy and globalization. Power politics and international organizations. (Field 5, Global Awareness Attribute) *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. (Field 5, Global Awareness attribute) *Fall/Spring*

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. *Fall*

PSC 217 Research Methods 3 credits

Basic, non-statistical treatment of current techniques and methodologies which characterize political science research. *Spring*

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. (Field 5, Oral Communication Attribute) *Fall*

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. *Fall*

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. *Fall*

PSC 236 Political Campaigning 3 credits

Campaigning resources, techniques, strategies and goals. Practical and theoretical treatment. Field research. *Spring*

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. *Spring*

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. (Field 5, Global Awareness) *Fall*

PSC 242 International Organizations 3 credits

International and transnational. Intergovernmental and non-governmental. Regional and global. Content areas: political, economic and humanitarian. (Field 5, Global Awareness & Writing Intensive Attributes) *Fall*

PSC 244 War: Causes and Consequences 3 credits

Investigates the conditions, processes, and events which lead to the outbreak of war, and explores the political, strategic, and human consequences of wars. In-depth analysis of selected wars in history and in contemporary global politics. *Spring*

PSC 245 American Foreign Policy 3 credits

US diplomatic history since 1945. Structure, process and issues in contemporary American foreign relations. *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. *Spring*

PROGRAM OF STUDY POLITICAL SCIENCE

PSC 320 American Constitutional Law I **3 credits**

Development of constitutional law in the U.S. from the founding of the Republic to present. Case-study method in selected areas of constitutional jurisprudence. (Field 5, Justice Attribute) *Fall*

PSC 321 American Constitutional Law II: Civil Liberties **3 credits**

Role of modern and contemporary Supreme Court in controversial areas of civil liberties and related questions. Current interpretations of the Bill of Rights and the Fourteenth Amendment. (Field 5, Justice Attribute) *Spring*

PSC 325 Elections and Voting Behavior **3 credits**

The various types of elections and electoral procedures and their relationship to voter turnout and voter choice. *Fall*

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 104 or permission of instructor. *Fall*

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. *Spring*

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. (Field 5) *Spring*

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. *Spring*

PSC 346 National Security Council **3 credits**

Role-play simulation of the National Security Council. Student "policymakers" conduct briefings, develop initiatives and debate policy positions and proposals concerning U.S. national security. Emphasizes strategic, ethical and moral dilemmas in foreign policy decision-making. Prerequisite: Permission of instructor. *Fall*

PSC 355 European Union **3 credits**

History of European integration. Structure, process and politics of EU policies. Optional international, intercollegiate simulation of the EU and travel (EuroSim). (Field 5, Global Awareness & Oral Communication Attribute) *Fall*

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. *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. (Field 5, Global Awareness & Writing Intensive Attributes) *Fall*

PSC 401 Capstone **1 credit**

Integrative experience for senior majors. Allows students to demonstrate their proficiency in the discipline and prepares them for post-graduate education or employment. Team-taught. May be offered online. *Spring*

PSC 420 The Constitution, The War on Terror and Civil Liberties **3 credits**

Constitutional and civil liberties issues in the war on terrorism. USA Patriot Act, ethnic and racial profiling, enhanced interrogation, data collection, Foreign Intelligence Surveillance Act and Fourth Amendment. U.S. citizens as enemy combatants and the military detention and trial of terrorist suspects. *Spring*

PSC 436 Seminar in Presidential Campaigning and Advance Work **3 credits**

Political advance work in the context of contemporary American presidential campaigns. Prerequisite: Permission of instructor. *Spring*

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: International Relations majors or permission of instructor. *Spring*

PROGRAM OF STUDY
POLITICAL SCIENCE

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. Core capstone. *Spring*

PSC 498 Internship **3 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. Prerequisite: Permission of chair of the Political Science department and associate dean. Prior to 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. *Fall/Spring*

PSC 499 Independent Study **3 credits**

Research and/or directed reading under direction of faculty members associated with the Political Science department. Prerequisite: Permission of chair of the Political Science Department and associate dean. Prior to 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. *Fall/Spring*

OTHER COURSES

CRJ 227 Criminal Justice I **3 credits**

See CRJ 227 for course description. *Fall*

CRJ 228 Criminal Justice II **3 credits**

See CRJ 228 for course description. *Spring*

ECO 401 Public Finance **3 credits**

See ECO 401 for course description. *Fall*

HIS 280 The Making of Modern Africa **3 credits**

See HIS 280 for course description. *Spring*

HIS 394 Contemporary Middle East **3 credits**

See HIS 394 for course description. *Spring*

PROGRAM OF STUDY
PRE-ENGINEERING (2+2)

PRE-ENGINEERING PROGRAMS

Director: Michael Wood, 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.

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. For a more detailed description of the program and faculty, visit <http://www.canisius.edu/physics/pre-engineering/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/physics/learning-goals-objectives/>

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 must have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. 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.

Curricular Requirements for the Major Core Curriculum

Students in the 3+2 dual degree program complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

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.

PROGRAM OF STUDY

PRE-ENGINEERING (2+2)

2+2 Program

Major Courses

This varies depending on the engineering major chosen, but typically includes:

Course	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 222	Differential Equations	4
CHM 111	General Chemistry I	4
CHM 112	General Chemistry II (or PHY 225)	4
PHY 107	Computer Programming for Science	4
PHY 223	Physics I	4
PHY 224	Physics II	4
PHY 225	Physics III (or CHM 112)	4
PHY 226	Introduction to Electronics	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

Major Electives

Linear Algebra (MAT 219) (4), Additional computer science (CSC 111) (4-3) and/or Organic Chemistry (CHM 227, CHM 228) (4-4), depending on choice of engineering major.

Major Experiences

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.

PROGRAM OF STUDY
PRE-ENGINEERING (2+2)

Recommended Schedule: 2+2 program

Fall	Credits	Spring	Credits
Freshman		Freshman	
CHM 111	4	CHM 112/Elective*	4
EGR 111	3	MAT 112	4
PHY 107	4	PHY 223	4
MAT 111	4	*If PHY 225 will be taken	
Sophomore		Sophomore	
MAT 211	4	MAT 222	4
PHY 224	4	PHY 225/Elective*	4
EGR 211	3	PHY 226	4
EGR 207	3	EGR 208	3
		EGR 214	3
		*If CHM 112 was taken	
Junior			
Completed at an Engineering Institution			
Senior			
Completed at an Engineering Institution			

Additional Course Considerations

Additional courses in some engineering majors may require cross-registration at University at Buffalo (UB).

Dual Majors

Dual majors in the Engineering 2+2 program would be subject to the regulations of the engineering institution.

Minors

Minors would also be subject to the regulations of the engineering institution in which the degree is completed. Students in this program cannot do minors at Canisius, as no degree from Canisius is completed in this program.

PROGRAM OF STUDY PRE-ENGINEERING (2+2)

3+2 Program

Major Courses

Course	Title	Credits
PHY 107	Computer Programming for Science	4
PHY 223-224	General Physics for Physical Science Majors	4-4
PHY 225	General Physics III	4
PHY 226	Basic Electronics	4
PHY 330	Electrodynamics I	3
PHY 331	Electrodynamics II	3
PHY 332	Statistical and Thermal Physics	3
PHY 335	Mathematics for Physicists	4
PHY 350-351	Advanced Laboratory	1-1
PHY 443	Classical Mechanics	3
PHY 446	Quantum Mechanics I	3
PHY 447	Quantum Mechanics II	3
PHY 445	Special Topics in Physics	1
PHY 498	Senior Project	1-3
CHM 111	General Chemistry I	4
MAT 111-112	Calculus I and II	4-4
MAT 211	Calculus III	4
MAT 222	Differential Equations	4

Also, depending on Engineering major

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.

Major Electives

Linear Algebra (MAT 219) is advisable, and required by some engineering programs.

Major Experiences

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.

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.

PROGRAM OF STUDY PRE-ENGINEERING (3+2)

Recommended Schedule: 3+2 Program

Fall	Credits	Spring	Credits
Freshman		Freshman	
CHM 111	4	CHM 112/Elective*	4
MAT 111	4	MAT 112	4
PHY 107	4	PHY 223	4
EGR 111	3	*If PHY 225 will be taken	
Sophomore		Sophomore	
MAT 211	4	MAT 222	4
PHY 224	4	PHY 225/Elective*	4
EGR 207	3	PHY 226	4
		EGR 208	3
		*If CHM 112 was taken	
Junior		Junior	
EGR 211	3	EGR 214	3
Fall Physics courses in Physics Curriculum		Spring Physics courses in Physics Curriculum	

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.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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. Careful advising will be required for students in the 3+2 program wishing to complete a minor in addition to both degrees.

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) (4), Organic Chemistry (CHM 227- 228) (4-4) or additional computer science courses (CSC 111, CSC 212, CSC 213) (4-4-4-3) may be valuable electives.

PROGRAM OF STUDY
PRE-ENGINEERING (3+2)

2015 – 2017 PRE-ENGINEERING COURSES

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. *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. Prerequisites: PHY 223, MAT 112. *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. *Spring*

EGR 211 Thermodynamics 3 credits

Students learn the fundamental concepts and laws of thermodynamics, equilibrium with applications to physical and chemical systems. Prerequisite: PHY 223. *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. *Spring*

PROGRAM OF STUDY
PROFESSIONAL AND TECHNICAL STUDIES

PROFESSIONAL AND TECHNICAL STUDIES

Director: Sandra McKenna

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.

Curricular Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and may be used to complete a minor, to satisfy prerequisites for advanced study, or to design a course of study to achieve their professional goals. The decision may be based on career goals or planned graduate studies. Minors generally range from 6-8 required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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 a more detailed description of the program and tuition fee structure please go to <http://www.canisius.edu/professional-technical/>

PROGRAM OF STUDY
PSYCHOLOGY

PSYCHOLOGY

Chair: Susan K. Putnam, PhD

Introduction

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/psychology/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/psychology/learning-goals-objectives/>

Qualifications

Students must maintain a 2.0 GPA in the major and a 2.0 overall average to graduate with a degree in Psychology. All students must complete a minimum of 120 credit hours to graduate.

Advisement

All freshman students will be assigned an advisor by the Griff Center. After completing their first year, they will select a faculty member to serve as their psychology major advisor. Students should contact the department administrative associate, Sharon Lotterer, at (716) 888-2510 to have an advisor assigned if they do not already have one. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

Course	Title	Credits
Four 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
Core I: Neuroscience & Cognition (one course to be chosen from the following)		
PSY 324	Cognitive Psychology	3
PSY 326	Psychology of Memory	3
PSY 391	Biopsychology of Stress	3
PSY 397	Neurobiology of Mental Disorders	3
PSY 398	Neurobiology of Childhood Mental Disorders	3
PSY 410	Fundamentals of Human Neuropsychology	3
PSY 431	Sensation and Perception	3
Core II: Developmental & Psychosocial (one course to be chosen from the following)		
PSY 203	Lifespan Developmental Psychology	3
PSY 302	Personality Psychology	3
PSY 303	Abnormal Psychology	3
PSY 318	Social Psychology	3
PSY 323	Motivation and Emotion	3
PSY 384	Child & Adolescent Psychology	3
Core III: Outcomes & Applications (one course to be chosen from the following)		
PSY 229	Industrial/Organizational Psychology	3
PSY 329	Leadership and Motivation	3
PSY 334	Child, Family, & Community Psychology	3
PSY 373	Behavior Modification	3
PSY 395	Assessment in the Behavioral Sciences	3
PSY 452	Techniques of Counseling	3
PSY 453	Theories of Counseling	3

PROGRAM OF STUDY PSYCHOLOGY

Major Electives

Psychology electives: any three courses listed in the catalog or substitutions approved by the department chairperson.

Recommended Semester Schedule for Major Course

Fall	Credits	Spring	Credits
Freshman		Freshman	
PSY 101	3	PSY 102	3
Sophomore		Sophomore	
PSY 201 Psychology core	3	PSY 202 Psychology core	3
Junior		Junior	
Psychology core		Psychology elective	
Senior		Senior	
Psychology elective		Psychology elective	

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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 Psychology Department allows students to choose course concentrations in several areas. These include Industrial/Organizational Psychology, School Psychology, Clinical Psychology (and subareas), Forensic Psychology, Neuropsychology, and Sports Psychology. Students should consult with their advisor before selecting a concentration.

PROGRAM OF STUDY PSYCHOLOGY

2015 – 2017 PSYCHOLOGY COURSES

PSY 101 Introduction to Psychology 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. *Fall*

PSY 102 Introduction to Psychology 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. *Spring*

PSY 201 Basic Statistics for Behavioral Sciences 3 credits

Descriptive statistics, probability, sampling distributions, hypothesis testing and inferential statistics. SPSS for Windows. *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. *Fall/Spring*

PSY 203 Lifespan Developmental Psychology 3 credits

Important factors in the psychological development of the child. Social, biological and historical antecedents of behavior from birth through puberty. *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. *Fall*

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. *Spring*

PSY 302 Personality 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. *Fall*

PSY 303 Abnormal Psychology 3 credits

Overview of psychopathology: history, assessment, causes, DSM-IV, clinical symptoms and treatment. Review of major DSM-IV disorders with an emphasis on adults. *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. *Spring*

PSY 310 Applied Behavior 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. *Spring*

PSY 312 Autism Spectrum Disorders 3 credits

This course provides an overview of the comprehensive needs and characteristics of and treatments for individuals with autism spectrum disorders (ASDs). *Fall*

PSY 318 Social Psychology 3 credits

The self in social interaction: social perception and cognition, development and maintenance of relationships, attitudes, prejudice, social influence, group dynamics and related gender issues. (This course also counts for WST credit.) *Spring*

PROGRAM OF STUDY PSYCHOLOGY

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. *Spring*

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. *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. *Fall*

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. *Spring*

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 status. *Spring*

PSY 334 Child, Family and Community Psychology **3 credits**

Effects of social and non-social environments on emotions, thoughts and behaviors. Psychological reactions and adjustments to the nature of community life. Deals with social problems such as AIDS, alcoholism and child and elder abuse. (Also counts for CRJ credit.) *Fall*

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. *Spring*

PSY 373 Behavior Modification **3 credits**

Application of conditioning principles to changing human behavior and cognitions, emphasis on practical problems. *Fall*

PSY 384 Child 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). *Fall/Spring*

PSY 391 Biopsychology of Stress **3 credits**

This course is designed to give students an understanding of the 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. *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 *Fall/Spring*

PSY 397 Neurobiology of Mental Disorders **3 credits**

Examines the role of the central nervous system and other biological factors underlying the symptoms, etiology and treatment of various mental disorders. *Fall*

PROGRAM OF STUDY PSYCHOLOGY

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. PSY 397 or a Behavioral Neuroscience/ Neuropsychology course is a prerequisite. *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. *Spring*

PSY 406 Positive Psychology **3 credits**

Seminar course focusing on topics such as happiness, optimism, resilience and courage. Considers what makes a life meaningful and ways to achieve a positive life. *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. *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. *Spring*

PSY 452 Techniques of Counseling **3 credits**

Foundations of counseling and psychotherapy with an emphasis on the mastery of technique and practical applications. Assessment and treatment planning to facilitate cognitive, emotional and behavioral change for a variety of patient populations. *Fall*

PSY 453 Theories of Counseling **3 credits**

The theoretical background of selected counseling techniques. (Psychodynamic, behavioral, family systems) Students will form their own personal theories. *Spring*

PSY 454 Registered Behavior Technician (RBT) Course **3 credits**

This course provides requisite education/training to become a credentialed service provider for Autistic populations. An RBT is responsible for the direct implementation of behavioral plans developed by Board Certified Behavioral Analysts. Successful completion of an RBT Competency Assessment at the end of the semester will result in official certification. Prerequisites: PSY 101-102, PSY 201-202, PSY 373. *Spring*

PSY 495 Research Seminar in Psychology **3 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. Prerequisites: PSY 101-102, PSY 201-202, junior or senior status and permission of instructor. *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. Prerequisites: PSY 101-102, PSY 201-202, PSY 401, junior or senior status, or permission of instructor. *Fall*

PSY 498 A-G Psychology Practicum **3 credits**

Internships are available in clinical counseling psychology, forensic psychology, industrial/organizational psychology, neuropsychology/school psychology, and sports psychology. Joint supervision by staff members and agency personnel. Registration requirements vary; six credit maximum. Prerequisite: Permission of chair or supervising faculty member. *Fall/Spring/Summer*

Please click on this link to find out how to register for a practicum <http://canisiuspsychology.net/psychwiki/PracticumRequirements>

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. Prerequisite: Permission of the instructor, department chair and associate dean. *Fall/Spring/Summer*

PROGRAM OF STUDY
RELIGIOUS STUDIES

RELIGIOUS STUDIES
AND THEOLOGY

Chair: Rebecca Krawiec, PhD

Introduction

Religion plays an important role in human life and history. A liberal education would be seriously incomplete if it did not provide some of the intellectual tools necessary for dealing with this important dimension of human life. The department 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. 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 courses in four different areas: World Religions, History of Christianity, Religion in the Modern World, and Systematic Theology. In its courses the department offers a scientific and theological study and appreciation of Roman Catholicism, other confessional Christian churches, Jewish religious thought, the Islamic tradition, and a variety of other religions. This approach involves the ecumenical and comparative study of religions and a positive approach to the varieties of non-religion, such as atheism. The department provides the opportunity for a critical appraisal of religious faith through the study of primary source materials – scriptural, historical, and theological – and the use of interdisciplinary methodologies, such as anthropology, sociology, and psychology. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/religious-studies/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/religious-studies/learning-goals-objectives/>

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. 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. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major in Religious Studies and Theology (10 Courses)

Course	Title	Credits
RST 200	Introduction to the Hebrew Bible	3
RST 201	Introduction to the New Testament	3
	RST Course in a non-Christian contemporary religion	3
RST 400	Religious Studies and Theology Seminar	3
RST 489	Project for Majors	3
	Electives: 5 free electives chosen from any course listed under Religious Studies and Theology courses (RST 101 may not be included.)	15
Total: 10 Courses		30

PROGRAM OF STUDY
RELIGIOUS STUDIES

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. These are immersion experiences, often abroad, and are offered on a rotating basis. Please contact Dr. Timothy Wadkins for further information.

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
RST 101	3	RST 200	3
Sophomore		Sophomore	
RST 201 RST Elective	3 3	RST Course in a non-Christian contemporary religion	3
Junior		Junior	
RST 400 RST Elective	3 3	RST Elective RST Elective	3 3
Senior		Senior	
RST 489	3	RST Elective	3

PROGRAM OF STUDY RELIGIOUS STUDIES

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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. Religious Studies and Theology majors have often majored in Communications, Education, History, Philosophy, or Psychology.

Minors

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional work may be required. Students must complete the appropriate minor request form.

The Religious Studies and Theology Department offers 3 minors. The requirements are listed below. The Religious Studies and Theology department is also the administrative center for an Interdisciplinary Minor in Catholic Studies. For more information about this program and the requirements of this minor, please see its page in this catalog.

Religious Studies and Theology Minor

Course	Title	Credits
RST 200 or 201	Biblical Studies	3
RST 222	Survey of Eastern Religions	3
RST 325, 340	Christian Traditions course	3
	Electives: 3 upper level (200 or above) RST courses	9
	Total: 6 courses	18

Christian History, Thought, Ethics Minor

Course	Title	Credits
RST 325, 327	Christian History: 1 course	3
RST 340	Moral Issues Today	3
	Electives: 4 upper level (200 or above) RST courses	12
	Total: 6 courses	18

Religions of the World Minor

Course	Title	Credits
Total: 6 courses	Survey of Eastern Religions	3
	Electives: 5 upper level (200 or above) RST courses	15
	Total: 6 courses	18

Interdisciplinary Minor in Catholic Studies

For more information about this minor, please go to their page in this catalog.

Total: 6 courses

18 credits

PROGRAM OF STUDY RELIGIOUS STUDIES

2015 – 2017 RELIGIOUS STUDIES AND THEOLOGY

Introductory Level

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. (Foundation)
Fall/Spring

Intermediate Level

200 level courses generally introduce a student to a religion or a particular method of study of religion; 300 level courses generally explore a particular topic or aspect of religion in greater depth.

All courses listed have RST 101 as a prerequisite.

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. (Field 1, Global Awareness)

RST 201 Introduction to the New Testament 3 credits

Introduction to the literature and background of the New Testament. (Field 1)

RST 219 History of Eastern Orthodox Christianity 3 credits

Historical study of Eastern Christian Churches. (Field 1, Global Awareness)

RST 220 Introduction to Eastern Religions 3 credits

History, meaning, and practice of living religions such as Hinduism, Buddhism, and Islam. (Field 1, Global Awareness)

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. (Field 1, Diversity)

RST 222 African Religions 3 credits

Thematic study of religion in tribal societies. Primary emphasis on African, American Indian, and Pacific Island traditions. (Field 1, Global Awareness)

RST 224 Islam: Tradition and Revival 3 credits

From pre-Islamic Arabia to Muslim reform in the modern world. Islamic cult, institutions, and faith. Islam in Africa, Asia, and the Middle East today. Also accepted for Anthropology major and minor credit (Field 1, Global Awareness)

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. (Field 1)

RST 230 Catholic Belief Today 3 credits

Scripture and tradition. the Trinity, incarnation, grace, sacramental life, and worship. The Church as community and structure. (Field 1)

RST 231 Introduction to Catholic Studies 3 credits

Major movements and personalities in Catholic theology, history, culture, and spirituality. The Catholic worldview and its relation to modern society. (Field 1)

RST 234 Christians (En) Countering Injustice: Analyzing Justice, Injustice, & Opportunities for Action 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. (Field 1, Justice)

RST 235 Religion and Politics 3 credits

Interaction of religion and politics in the United States and other cultures. (Field 1, Justice, Oral Communication)

RST 236 Theology and Foreign Film 3 credits

Analysis of a selection of foreign films to understand the artists' positions regarding the nature of humanity, of God, and of other theological themes. (Field 1)

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. (Field 1)

PROGRAM OF STUDY RELIGIOUS STUDIES

RST 240 Development of Jewish Religious Thought and Practice **3 credits**

Jewish religious thought from biblical times to the present: Hebraism and Judaism in pre-Christian times, Jesus and Jewish thought and modern trends in Judaism. (Field 1, Diversity)

RST 242 Introduction to the Spirituality of Business **3 credits**

Offers some suggestions about how Christianity and its spirituality, based on a vision of ultimate reality, provides practical wisdom to make wise decisions and develop the virtues necessary for happiness in a world where business contextualizes many of our decisions—as employers, employees, investors, and customers (Field 1, Ethics)

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. (Field 1, Global Awareness)

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. (Field 1)

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. (Field 1)

RST 328 Jesuits: History, Spirituality, Culture **3 credits**

Life and spirituality of St. Ignatius of Loyola. History of Jesuits. (Field 1, Oral Communication)

RST 340 Moral Issues Today **3 credits**

An inquiry into religious and secular approaches to morality and the issues raised by specific moral problems. (Field 1, Ethics)

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. (Field 1, Justice, Writing)

RST 342 Theological Ethics and Environmental Justice **3 credits**

Investigation of the models of theological ethics and the ways in which ethics informs human interaction with the environment. (Field 1, Ethics, Oral Communication)

RST 343 Religion and the Challenge of Science **3 credits**

Traces the emergence of science as independent from and a challenge to the religious world view. (Field 1)

RST 345 Bio-Moral Problems **3 credits**

Considers a number of problem areas such as genetic intervention, medical experimentation, behavior control, organ transplants, resource allocation, and death and dying. (Field 1, Ethics)

RST 353 Seven Signs of Love **3 credits**

The presence of God in the midst of the human community, as symbolized by the sacraments. Their history, interpretation, and anthropology. (Field 1)

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. (Field 1)

RST 360 Magic, Science and Religion **3 credits**

Scholarly approaches used to understand how diverse peoples of the world conceive, make use of, and tap into the realm of the extra human. Focus on "exotic" societies and peoples, exploration of the meanings of magic, science, and religion in the more familiar contemporary United States and Europe. (Field 1, Global Awareness)

RST 399A 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. (Core Capstone)

RST 399B Religious Diversity in Buffalo **3 credits**

Exploration of religious diversity in Buffalo, the United States, and the world. Visits to congregations to observe worship and interviews to learn about religious beliefs, practices, and experiences of interactions with other religious communities. (Core Capstone)

PROGRAM OF STUDY RELIGIOUS STUDIES

RST 399C 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. (Core Capstone)

RST 399D Catholic Concept of Conscience **3 credits**

Study of the Catholic understanding of conscience during the past 50 years. Discussion of both personal and public ethics. (Core Capstone)

Other Courses

CLS 308 Pagans and Christians **3 credits**

CLS 309 Greek and Roman Religion **3 credits**

HIS 302 A Life in the Colonial Atlantic World **3 credits**

HIS 306 The American Religious Experience **3 credits**

PSY 230 Psychology of Religion **3 credits**

Advanced Level

400 level courses are reserved for majors, minors, or with special permission of the instructor and require RST 101 as a prerequisite.

RST 400 Religious Studies and Theology Seminar **3 credits**

A seminar for RST majors and minors, focusing on the history of the theory and method in the academic study of religion.

RST 489 Projects for Majors **3 credits**

Concentrated investigation of a topic of particular interest to the student, under supervision of faculty advisor. Prerequisite: Departmental approval. *Fall/Spring*

RST 496 Internship **2 or 3 credits**

Combination of teaching or religious work with special readings and theological reflection, under the guidance of department faculty. Prerequisite: Consent of chair. *Fall/Spring*

RST 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. Prerequisites: Permission of the instructor, department chair, and associate dean.

PROGRAM OF STUDY
SOCIAL SCIENCES PROGRAM

SOCIAL SCIENCES PROGRAM

The social science major 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.

Advisement

Canisius students are advised by an associate dean in the College of Arts and Sciences. Students interested in the major or Associate degree should contact their associate dean to set up an advising appointment or to discuss any questions. All students 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 must maintain an overall 2.0 cumulative average to graduate with a degree from Canisius.

Social Sciences Curriculum (Bachelor of Arts Degree)

Core Curriculum Requirements

All students complete Core Curriculum requirements as part of their overall Canisius Education. These requirements can be found at: <http://www.canisius.edu/academics/core/>

Major course requirements (21 courses)

Course	Title	Credits
Basic social sciences: four courses each from four of the following departments, for a total of 16 courses		48
ANT 121-122	Anthropology plus two 300/400 level courses	
two of the following:	Communication Studies COM 201, 202, 203, 204, 205, 206 plus two 300/400 level courses	
ECO 101-102,	Economics plus two 300/400 level courses	
HIS 123-124,	History plus two 300/400 level courses	
PSC 103-104	Political Science plus two 300/400 level courses	
PSY 101-102,	Psychology plus two Psychology courses above 100 level	
SOC 110 and SOC 111	Sociology plus two 300/400 level 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 and Computers	3
	Social Sciences methods PSC 217, SOC 342, or URS 350, or ANT 351	3

Free electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY

SOCIAL SCIENCES PROGRAM

Associate of Arts Degree

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 <http://www.canisius.edu/academics/core/>

Major course requirements (8 courses)

Course	Title	Credits
Social Sciences Track		
MAT 106	Calculus for the Non-Sciences I	3
MAT 131	Statistics and Computers	3
Social Sciences electives - two courses from each of three areas		18
ECO 101-102	Economics	
PSC 101-102	Political Science	
PSY 101-102	Psychology	
SOC 110-111 or ANT 121-122	Sociology	
Business Track		
QNT 101	Quantitative Methods for Business	3
MAT 106	Calculus for the Non-Sciences I	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	

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.

PROGRAM OF STUDY

SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

SOCIOLOGY, ANTHROPOLOGY
& CRIMINAL JUSTICE

Chair: Erin E. Robinson, PhD
Sociology

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 <http://www.canisius.edu/sociology/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/sociology/learning-goals-objectives/>

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. 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. 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 be familiar with their Griff Audit and should make arrangements each semester to receive their registration PIN.

Curricular Requirements for the Major Core

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Major Courses

Course	Title	Credits
MAT 131	Statistics and Computers	3
SOC 110	Introduction to Sociology	3
SOC 111	Contemporary Social Problems	3
SOC 342	Social Research Methods	3
SOC 432	Theories in Sociology	3
SOC 461	Senior Capstone	1
	Six 3 credit sociology electives	18
Major Electives		
SOC 234	Environment and Society	3
SOC 240	Sociology of Religion	3
SOC 273	Social Movements and Social Change	3
SOC 291	Gender and Society	3
SOC 299	Immersion Reflection	1
SOC 300	Special Topics in Sociology	3
SOC 324	Visual Sociology	3
SOC 340	Sociology of the City	3
SOC 341	Race and Ethnic Relations	3
SOC 390	Marriage and Families	3
SOC 498	Internship	3
SOC 499	Individual Reading and Research Methods	3

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

<i>The following courses in the other departments count as electives for the sociology major. No more than 2 will count towards the sociology major</i>		
ANT 122	Sociocultural Anthropology	3
ANT 351	Qualitative Research Methods	3
ANT 355	Sociolinguistics	3
ANT 360	African American English	3
ANT 365	Gender Issues in Language	3
CRJ 320	Criminology	3
CRJ 354	Juvenile Delinquency	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.

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
SOC 110	3	SOC 111	3
Sophomore		Sophomore	
MAT 131	3	SOC elective	3
SOC elective	3		
Junior		Junior	
SOC 342	4	SOC elective	3
SOC elective	3		
Senior		Senior	
SOC 432	3	SOC 461	1
SOC elective	3	SOC elective	3

PROGRAM OF STUDY

SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

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. Students must complete SOC 110, SOC 111 and 3 SOC Electives (2 must be at the 300-400 level). Students must complete the minor request form. (15 credits)

Interdisciplinary Minor in Peace and Justice Studies

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. See <http://www.canisius.edu/sociology/courses/peace-justice-studies/>

Social Sciences Minor in Child, Family and Community Studies

The 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. 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.

2015-2017 SOCIOLOGY 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. (Field 5) *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. (Field 5, Diversity Attribute) *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. (Field 5) *Spring*

SOC 240 Sociology of Religion **3 credits**

A comprehensive introduction to the sociology of religion, from the classical works of Emile Durkheim and Max Weber, to the current trends of secularization and revitalization. Will also cover sociological analysis of religion in America.

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. (Field 5, Justice Attribute) *Spring*

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY AND CRIMINAL JUSTICE

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. (Field 5)

SOC 299 Immersion Reflection **1 credit**
Critical reflection of immersion experience. Permission of instructor required.

SOC 300 Special Topics in Sociology **3 credits**
Critical examination of a selected topic in sociology. Subject matter determined by the instructor.

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. *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.

SOC 342 Social Research Methods **3 credits**
Overview of the major steps in constructing social science research, from developing a research question, operationalization and measurement through data collection and analysis. Prerequisite: MAT 131 with minimum grade of C. *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 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. Prerequisite: Senior status, majors or minors only. *Fall*

SOC 461 Senior Major Capstone **1 credit**
Integrating experience for majors; focus is on demonstrating proficiency in the discipline and preparation for post-graduate studies or employment. *Spring*

SOC 498 Internship **3 credits**
Opportunity for students to participate in the daily work of an agency or organization. Prerequisite: Instructor's signature, GPA of at least 2.75. *Fall/Spring*

SOC 499 Individual Reading and Research **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. Prerequisite: Permission of the instructor, department chair and associate dean. *Fall/Spring*

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

ANTHROPOLOGY

Introduction

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 <http://www.canisius.edu/anthropology/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/anthropology/learning-goals-objectives/>

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 Anthropology. 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. 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 are advised to be familiar with their Griff Audit and should make arrangements each semester to receive their registration PIN.

Curricular Requirements for the Major Core

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

Additional Course Considerations

The department encourages anthropology majors to study a foreign language of their choice and to participate in the college study abroad program.

Major Courses (34 credits required for the major)

Course	Title	Credits
ANT 121	Biological Anthropology	3
ANT 122	Sociocultural Anthropology	3
ANT 310, ANT 355, ANT 360, ANT 365, or ANT 370	Any Linguistics	3
ANT 230	Introduction to Archeology	3
ANT 351	Qualitative Research Methods	3
ANT 461:	Senior Capstone	1
Major Electives: Choose 6 Electives		
ANT 240	Anthropology & Film	3
ANT 290	Anthropology & Evolution	3
ANT 300	Special Topics in Anthropology	3
ANT 310	Codebreaking	3
ANT 320	Myth and Folklore	3
ANT 333	Forensic Anthropology	3
ANT 340	Environmental Anthropology	3
ANT 350	Business Anthropology	3
ANT 355	Sociolinguistics	3
ANT 360	Dialects of North America	3
ANT 365	Gender Issues in Language	3
ANT 370	Origin and Evolution of Language	3
ANT 399	Field Work	3
ANT 499	Individual Reading and Research	3

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

The following courses count as electives for the anthropology major and minor		
BIO 312	Primatology	3
RST 221	Native American Religions	3
RST 222	African Tribal Religions	3
RST 224	Islam	3
RST 226	Hinduism	3
RST 360	Magic, Science and Religion	3
SOC 234	Environment and Society	3

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
ANT 121	3	ANT 122	3
Sophomore		Sophomore	
ANT 230	3	Any Linguistics	3
ANT elective	3	ANT elective	3
Junior		Junior	
ANT 351	3	ANT elective	3
ANT elective	3	ANT Elective	3
Senior		Senior	
ANT elective	3	ANT 461	1

PROGRAM OF STUDY

SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

Dual Majors

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision 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. 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.

Many students who major 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. The sequence of courses for dual majors is the same as for regular majors. 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.

Minors

The anthropology minor consists of 5 courses: ANT 121 Biological Anthropology (3), ANT 122 Sociocultural Anthropology (3), ANT 230 Archeology (3), Any Linguistics Course and one ANT elective. Students must complete the minor request form. 15 credits

2015-2017 ANTHROPOLOGY COURSES

ANT 121 Biological Anthropology 3 credits

Our species in nature: evolutionary theory, principles of heredity, population genetics, human variations, fossil hominids, primate classification and behavior studies. (Field 6) *Fall/Spring*

ANT 122 Sociocultural Anthropology 3 credits

Explores importance of culture in explaining diversity in human behavior and beliefs, looking at variety of societies inhabiting the world. Details the development of the field and the methods and theories employed by socio-cultural anthropologists to better understand humanity. (Field 5, Diversity Attribute) *Spring*

ANT 230 Introduction to Archaeology 3 credits

Introduction to the principles, methods, and theoretical approaches of modern archaeology; overview of history and practice of archaeology; how the past is reconstructed; origin of culture and development of social complexity. (Field 5, Global Awareness Attribute) *Fall*

ANT 240 Anthropology & Film 3 credits

A critical survey of both documentary and commercial films on themes in anthropology, e.g. human evolution, ape behavior, socio-cultural change, and the significance of symbolic language for adaptation and survival. Stresses the value of both facts and concepts in an anthropological view of our species. *Spring*

ANT 290 Anthropology and Evolution 3 credits

Concept of evolution in the five major areas of anthropology: biological, archaeology, sociocultural, linguistics, and applied anthropology. This course stresses the value of empirical evidence and critical thinking. (Field 5) *Fall*

ANT 300 Special Topics in Anthropology 3 credits

Critical examination of a selected topic in anthropology. Subject matter determined by the instructor.

ANT 310 Codebreaking 3 credits

The evolution of codes and the relevance of codes to contemporary society. Covers the history of codes and the achievements of code breakers who deciphered ancient texts. Students will acquire and practice skills needed to identify structural components of codes.

ANT 320 Myth and Folklore 3 credits

Explores the role of traditional stories and beliefs in cultures and introduces central concepts, vocabulary, theories, and methods of anthropology and folklore. Explores how folklore forms operate within specific groups of people who identify themselves along regional, ethnic, racial, occupational, gender, political and/or class lines.

ANT 333 Forensic Anthropology 3 credits

Anthropological methods and information used to survey the origin and history of crime science. Emphasis on the use of well-known case studies in order to understand and appreciate the value of forensic investigation. *Fall*

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

ANT 340 Environmental Anthropology 3 credits

This course examines how the concept of culture can contribute to our understanding of environmental issues, in terms of how human beings adapt to their environment and the way in which they understand and give meaning to the world they live in. Examines the reciprocal relationship between humans and their habitat.

ANT 350 Business Anthropology 3 credits

Applies anthropological theory and methodology in the context of business. Businesses deal with a diverse and fast changing global market place that impacts their products, services, employees, customers and ideas. Anthropological perspective will provide timely and meaningful information to ensure understanding of a global marketplace from a cultural perspective.

ANT 351 Qualitative Research Methods 3 credits

Survey of research designs from a qualitative perspective, including field research, participant observation, content analysis, ethnomethodology, and focus groups. Analysis and reporting of qualitative data. *Fall*

ANT 355 Sociolinguistics 3 credits

Investigates the nature of the relationship between social behavior and language change within linguistic communities.

ANT 360 Dialects of North America 3 credits

Explores the development and the structure of dialects of African American English, identifying phonological, morphological, syntactic, semantic and lexical differences that contribute to the richness and vitality of the language.

ANT 365 Gender Issues in Language 3 credits

Explores the intersection of language and gender, examining gender-related stylistic variation in conversation and communication between and among women and men as cross-cultural communication.

ANT 370 Origin and Evolution of Language 3 credits

Surveys theories of the origin and development of language, exploring early perspectives drawn from mythology, religion and philosophy as well as current views emerging from the social and natural sciences.

ANT 399 Field Work 3 credits

Offers practical experience in a variety of social situations and cultural settings. Observations and research logs are used to provide a basis for analysis. Prerequisite: Permission of department chair. *Fall/Spring*

ANT 461 Senior Major Capstone 1 credit

Integrating experience for majors; focus is on demonstrating proficiency in the discipline and preparation for post-graduate studies or employment. *Spring*

ANT 499 Individual Reading and Research 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. Prerequisite: Permission of the instructor, department chair and associate dean. *Fall/Spring*

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

CRIMINAL JUSTICE

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 <http://www.canisius.edu/criminal-justice/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/criminal-justice/learning-goals-objectives/>

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. 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. 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 Contrino, Director of Criminal Justice, for current advisement information. Students are advised to be familiar with their Griff Audit and should make arrangements each semester to receive their registration PIN.

Curricular Requirements for the Major Core

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

Major Courses (37 credits are required for the major)

Course	Title	Credits
MAT 131	Statistics and Computers	3
SOC 110	Introduction to Sociology	3
SOC 342 or ANT 351	Research Methods or Qualitative Research Methods	3
CRJ 227	Introduction to Criminal Justice I	3
CRJ 228	Introduction to Criminal Justice II	3
CRJ 320	Criminology	3
CRJ 382	Criminal Justice Ethics	3
CRJ 449	Criminal Law	3
CRJ 450	Criminal Procedure	3
CRJ 461	Senior Major Capstone	1
Criminal Justice Electives: three courses		
Major Electives		
CRJ 280	Language for Legal Professions	3
CRJ 300	Special Topics in Criminal Justice	3
CRJ 330	Current Issues in Forensic Psychology	3
CRJ 337	Violence and the Family	3
CRJ 344	Violent Crime in American Society	3
CRJ 345	Gangs in American Society	3
CRJ 351	Police and Community	3
CRJ 354	Juvenile Delinquency	3
CRJ 356	Treatment of Offenders	3
CRJ 357	Alternatives to Incarceration	3
CRJ 358	White Collar Crime	3
CRJ 359	Women and Crime	3
CRJ 498	Criminal Justice Internship	3
CRJ 499	Individual Reading and Research	3

The following courses offered by other departments or programs count as electives for the criminal justice major and minor

ANT 310	Codebreaking	3
ANT 333	Forensic Anthropology	3
BIO 299	Forensic Science	3
ISB 460	Computer Forensics	3
PSC 103	Constitutional Foundation of American Government	3
PSC 320	American Constitutional Law I	3
PSC 321	American Constitutional Law II	3
PSC 345	International Crime after 9/11	3
PSC 420	Constitution, War on Terror and Civil Liberties	3

The following psychology courses will count as electives for dual psychology/criminal justice majors

PSY 303	Abnormal Psychology	3
PSY 360	Law & Psychology	3

Dual psychology/criminal justice majors may satisfy the statistics and methods requirements with the following courses

PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 202	Experimental 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 or 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.

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

Recommended Semester Schedule for Major Course Requirements

Fall	Credits	Spring	Credits
Freshman		Freshman	
SOC 110	3	MAT 131	3
Sophomore		Sophomore	
CRJ 227 CRJ elective	3	CRJ 228 CRJ elective	3
Junior		Junior	
CRJ 382 SOC 342 or ANT 351	3 4-3	CRJ 320 CRJ elective	3 3
Senior		Senior	
CRJ 449	3	CRJ 450 CRJ 461	3 1

Dual Majors

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. Before a student declares a dual major it is important to meet with the appropriate academic departments for advisement. 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

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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 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 CRJ electives can be chosen from any of the criminal justice offerings, with at least one course at the 300 or 400 level.

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

The following courses are required for the Criminal Justice minor:

Course	Title	Credits
SOC 110	Introduction to Sociology	3
CRJ 227	Introduction to Criminal Justice I	3
CRJ 228	Introduction to Criminal Justice II	3
	CRJ electives (2 courses)	6
	Total (5 courses)	15

Inter-Disciplinary Minor in Computer Forensics

Computer forensics is the science of acquiring, preserving, retrieving and presenting data that has been processed electronically and stored on electronic media. Computer forensics refers to the forensic analysis of E-mail, instant messaging (IM), cellular phones, digital cameras, PDAs, iPods, 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 and Sciences or the School of Business, but who may have an academic or career interest in computer forensics.

Required courses

Course	Title	Credits
CRJ 227	Criminal Justice I	3
CRJ 228	Criminal Justice II	3
ISB 350	Telecommunications and Networking	3
ISB 460	Computer Forensics	3
ISB 470	Cyber Security	

2015-2017 Criminal Justice 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. *Fall*

CRJ 228 Criminal Justice II 3 credits

Examines sentencing, corrections, juvenile court, drug court, and global crime issues. *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. (Field 5) *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 320 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. (Justice Attribute) *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. *Fall*

PROGRAM OF STUDY
SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

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.
Fall/Spring

CRJ 344 Violent Crime in American Society **3 credits**
Examination into the theories that cause violent crime and behavior. Analysis into the factors attributed to violence - mental illness, racism, poverty, and interpersonal relationships.

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 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 357 Alternatives to Incarceration **3 credits**
Examines the most effective choices to safely punish or treat the offender in the community. Topics include use of intermediate sanctions, such as community service, as an alternative to incarceration.

CRJ 358 White Collar Crime **3 credits**
Crimes committed by "respectable people" in positions of responsibility in private or public sector. Nature of these crimes, how regulatory bodies and legal systems treat these criminals and how they seek to avoid detection and prosecution.

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 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, CRJ 228, SOC 342 or ANT 351. (Ethics Attribute) *Fall*

CRJ 449 Criminal Law **3 credits**
The substantive criminal law, including offences against persons, property and public morality with emphasis on New York State Penal Law. Criminal responsibility and defenses. Prerequisite: CRJ 227, CRJ 228. *Fall*

CRJ 450 Criminal Procedure **3 credits**
Key Supreme Court decisions on search and seizure, arrest, interrogation and identification of criminal suspects. Sentencing and punishment, appeal and post-conviction relief. Prerequisite: CRJ 227, CRJ 228, 449. *Spring*

CRJ 461 Senior Capstone **1 credit**
Integrating experience for majors; focus is on demonstrating proficiency in the discipline and preparation for post-graduate studies or employment. Required for class of 2017 and beyond. *Spring*

CRJ 498 Criminal Justice Internship **3 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: GPA of at least 3.0, junior or senior status, signature of major advisor. *Fall/Spring*

CRJ 499 Individual Reading and Research **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. Prerequisite: Permission of the instructor, department chair and associate dean. *Fall/Spring*

PROGRAM OF STUDY SPECIALIZED STUDIES

SPECIALIZED STUDIES

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.

Student Learning Goals

These are developed as part of the proposal for majoring in Specialized Studies. See Approval Criteria below.

Curricular Requirements for the Major

All approved Specialized Studies majors must include the college Core Curriculum. These requirements are described below and can be found at <http://www.canisius.edu/academics/core>

Foundations

FYS 101, ENG 101, PHI 101, & RST 101 (12 credits). Students in the All-College Honors Program will follow honors requirements.

Breadth of Knowledge

Seven Fields (21 credits)

Core Capstone

One course (3 Credits)

Cross-disciplinary Knowledge and Skills Requirements (six designated courses)

Courses designated for Field or courses that satisfy major or elective credit may carry these designations. Some courses may carry more than one designation. Students must take as many courses as necessary to achieve all six requirements.

Specialized Studies Courses

(36 minimum credits)

- 21 credits must be upper level courses (300-400 level - graduate courses may also be considered).
- 3 credits: Senior Project (see below for details).
- Free electives – 48 or fewer.
- Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation.

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).

PROGRAM OF STUDY

SPECIALIZED STUDIES

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 rationale 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.

PROGRAM OF STUDY
SPORT MANAGEMENT

SPORT MANAGEMENT

Chair: Peter Koehneke
Director: Shawn O'Rourke

Introduction

For a detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to <http://www.canisius.edu/sports-mgt/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/sports-mgt/learning-goals/>

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. 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. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

1. Business Foundation Course Requirements

Course	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

2. Sport Management Course Requirements

Course	Title	Credits
SPMT 150	Introduction to Sports Management	3
SPMT 230	Sport & Recreation Law	3
SPMT 241	Practicum	3
SPMT 245	Technology in Sport	3
SPMT 302	Sport & Ethics	3
SPMT 304	Sport, Culture & Society	3
SPMT 320	Psychology of Sport	3
PED 351	Coaching Theory & Techniques	3
SPMT 355	Sport Operation & Planning	3
SPMT 412	Sport Marketing	3
SPMT 420	Economics & 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	3
SPMT 490	Internship	6

3. Arts & Sciences Course Requirements

This degree program also requires 60 hours of Arts & Sciences (non-business & non-education) courses.

PROGRAM OF STUDY
SPORT MANAGEMENT

Recommended Semester Schedule for Major Course Requirements:

Fall	Spring
Freshman	Freshman
SPMT 150	SPMT 230
Sophomore	Sophomore
SPMT 241 ECO 101 MGT 101	SPMT 245 ECO 102
Junior	Junior
SPMT 302 SPMT 304 ISB 101 ACC 201	SPMT 320 PED 351 SPMT 355 ACC 202
Senior	Senior
SPMT 412 SPMT 455 SPMT 430 SPMT 440	SPMT 420 SPMT 475 SPMT 480 SPMT 490

2015-2017 SPORT MANAGEMENT COURSES

SPMT 150 Introductions for 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. *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. *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. *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. *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. *Fall*

SPMT 304 Sport, Culture & 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. *Fall*

SPMT 320 Psychology of Sport

3 credits

This course will review the major social/psychological theories utilized in current sport psychology research. *Spring*

PROGRAM OF STUDY
SPORT MANAGEMENT

SPMT 355 Sport Operation & 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. *Spring*

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. *Fall*

SPMT 455 Governance & 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. *Fall*

SPMT 430 Sport Communications 3 credits

This course provides a senior-level exploration of the role of sport communication in contemporary cultures. *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. *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. *Spring*

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. *Spring*

SPMT 480 Research Methods 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. *Spring*

SPMT 490 Internship 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. *Spring*

PROGRAM OF STUDY
URBAN STUDIES

URBAN STUDIES

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 <http://www.canisius.edu/urban-studies/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/urban-studies/learning-goals/>

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. 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. 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 Requirements for the Major Core Curriculum

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation. Students may graduate with more but not less than 120 credit hours.

PROGRAM OF STUDY
URBAN STUDIES

Major Courses

Course	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
HIS 237 or HIS 373 or HIS 381 or HIS 382 or HIS 396 or HIS 460	The Birth of Modern America or Urban Portraits: Topics in Urban History or History of Buffalo or New York State History or Politics and Society in American Film or The Life and Times of Theodore Roosevelt	3 3 3 3 3 3
ECO 310 or ECO 311 or ECO 312 or ECO 411	Metropolitan Economic Development and GIS or Regional Economics and GIS or Spatial Economics and GIS or State and Local Finance	3 3 3 3
URS 400	The Urban Challenge	1

Major Electives

Urban Studies Electives: three courses to be chosen from the following

Course	Title	Credits
CRJ 227	Introduction to Criminal Justice I	3
ECO 101	Principles of Macroeconomics	3
ECO 310	Metropolitan Economic Development and GIS	3
ECO 311	Regional Economics and GIS	3
ECO 312	Spatial Economics and GIS	3
ECO 411	State and Local Finance	3
FAH 109	History of Architecture	3
HIS 237	The Birth of Modern America	3
HIS 373	Urban Portraits: Topics in Urban History	3
HIS 381	History of Buffalo	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
PSC 103	Constitutional Foundations of American Government	3
PSC 215	National Issues and Public Policy	3
PSC 217	Research Methods	3
RST 225	Religion and Society	3
SOC 111	Contemporary Social Problems	3
SOC 340	Sociology of the City	3
URS 498	Urban Internship	1 - 9
URS 499	Independent Study	1 - 9

PROGRAM OF STUDY URBAN STUDIES

Recommended Semester Schedule for Major Course Requirements:

Fall	Spring
Freshman	Freshman
PSC 104	ECO 102
Sophomore	Sophomore
PSC 237	PSC 336
Junior	Junior
HIS 237 or HIS 373 or HIS 381 or HIS 382 or HIS 396 or HIS 460	PSC 334 URS Elective
Senior	Senior
ECO 310 or ECO 311 or ECO 312 or ECO 411	URS 400 URS Elective

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

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. 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.

2015 – 2017 URBAN STUDIES 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.
Spring

URS 498 Urban Internship 1-9 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. Prerequisite: Placement by Urban Studies Director. *Spring & Fall*

URS 499 Independent Study 1-9 credits

Research and/or directed reading under direction of faculty members associated with Urban Studies Program. Prerequisite: Permission of Urban Studies Director. *Spring & Fall*

PROGRAM OF STUDY

WOMEN & GENDER STUDIES PROGRAM

WOMEN & GENDER STUDIES PROGRAM

Co-Director: Johanna Fisher, Adjunct Professor
Co-Director: Tanya Loughead, PhD, Associate Professor

The Women & Gender Studies program 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 program 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 program 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 program 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 or certificate credential prepares students for graduate study in social work, law, business and human resources, counseling, and many other fields. The Women & Gender Studies Minor or Certificate 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 or the Certificate 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 <http://www.canisius.edu/womens-studies/index.dot>

Students who complete the Women & Gender Studies curriculum 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, and PhD in Human Rights Law.

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/womens-studies/learning-goals/>

Qualifications

Students must meet the programs requirements and maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a Certificate in Women & Gender Studies. All students must complete a minimum of 120 credit hours to graduate.

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.

Curricular Requirements for the Major Core

All students complete Core Curriculum requirements as part of their overall Canisius education. These requirements can be found at <http://www.canisius.edu/academics/core/>

PROGRAM OF STUDY

WOMEN & GENDER STUDIES PROGRAM

Minor and Certificate

Canisius College offers both a Women & Gender Studies Minor and a Certificate. Women & Gender Studies courses emphasize how gender roles are created and how they impact what we know and how we act in the world. Both the Women & Gender Studies Minor and Certificate encourage students to explore the complexities of our gendered world in a structured series of courses. Learning objectives for the Women & Gender Studies Program focus on gender, justice and oppression, power, and cultural diversity.

The Women & Gender Studies Minor consists of WGS 201 (Introduction to Women & Gender Studies) and four pre-approved Women & Gender Studies courses.

The Women & Gender Studies Certificate consists of WGS 201 (Introduction to Women & Gender Studies) and seven pre-approved Women & Gender Studies courses.

Many WGS courses count both towards Women & Gender Studies and as a Field or Attribute requirement within the Core Curriculum, thus making it possible for students to complete a Women & Gender Studies minor or certificate while taking few additional courses.

2015-2017 WOMEN AND GENDER STUDIES COURSES

WGS 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. (Field 5, Global Awareness)

Humanities

Course	Title	Credits
CLS 300	Roman Law	3
ENG 223	Images of Women in Literature and Film	3
ENG 306	18 th Century Literature	3
ENG 381	Post-Colonial Literature	3
FAH 159	Gender and Art	3
HIS 211	Women in the Western World	3
HON 377	Plantation Psychosis	3
PHI 240	Justice	3
PHI 251	Love, Friendship, and Moral Life	3
PHI 272	Gender and Philosophy	3
PHI 273	Race and Philosophy	3
PHI 305	Contemporary Continental Philosophy	3
PHI 379	Contemporary Women Philosophers	3
RST 342	Theological Ethics and Environmental Ethics	3
RST 345	Bio-Moral Problems	3
SPA 324	Topics in Conversation II (Latin American Culture)	3
SPA 459	The Body Erotic/The Body Politic	3
SPA 453	Almodóvar and La Movida	3

Social & Natural Sciences

Course	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 Communication	3
CRJ 337	Violence and the Family	3
SOC 291	Gender and Society	3
SOC 390	Marriage and Families	3

PROGRAM OF STUDY PRE-LAW

PRE-LAW

**The Frank G. Raichle Pre-Law Center
Pre-Law Committee: Robert Klump, Director,
Department of Political Science; Peter J. Galie,
Emeritus Professor/ Department of Political
Science; Peggy Lillis Snajczuk, Esq. Pre-Law
Advisory Council member; Julia Hilliker, Esq.,
Pre-Law Advisory Council member**

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 a 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 100)

Students wishing to choose law as a career may major, as undergraduates, in any field or fields. 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 go to <http://www.canisius.edu/pre-law/index.dot>

Recommended Electives

- **Accounting:** ACC 201—Financial Accounting; ACC 202—Managerial Accounting (introduction to financial concepts relevant to study of business-related law school courses such as taxation and corporate law)
- **Classics:** CLS 300—Roman Law & Society (the origins and development of civil and statutory law in the Western legal tradition)
- **Criminal Justice:** CRJ 449—Criminal Law; CRJ 450—Criminal Procedure (acquisition of substantive knowledge of major areas of law)
- **Economics:** ECO 101—Principles of Macroeconomics; ECO 102—Principles of Microeconomics (introduction to the economic system which undergirds and plays a major role in our legal system)
- **English:** ENG 385—Persuasive Writing (refinement of professional writing)
- **Philosophy:** PHI 225—Logic (preparation for LSAT); PHI 241—Ethics (ethical standards relevant to the practice of law); PHI 261—Philosophy of Law (philosophical underpinnings of law)
- **Political Science:** PSC 103 American Constitution (constitutional foundations of governmental power); PSC 320 American Constitutional Law I; PSC 321 American Constitutional Law II: Civil Liberties; PSC 420 The Constitution, 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); 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)

PROGRAM OF STUDY

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*

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*

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

One-one-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*

PROGRAM OF STUDY PRE-MED/HEALTH

PRE-MEDICAL AND PRE-HEALTH PROFESSIONS

Program Director: Allyson D. Backstrom, PhD

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, 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 frequently major in biology, chemistry or biochemistry, however, students may major in any academic area. Pre-Med/Health students have recently majored in psychology, mathematics, English 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. 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 <http://www.canisius.edu/pre-med/>

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 Griff 101 and 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. 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.

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 college year. These programs are competitive and appropriate for the highly motivated student who has thoroughly explored the health professions to develop an understanding and commitment to their chosen profession. Depending on the program, an outstanding high school record or early record in college is required. Please visit the Pre-Medical Center for the most up-to-date details on the various programs.

PROGRAM OF STUDY

PRE-MED/HEALTH

Early Assurance Program

Pre-Medical Early Assurance programs at Canisius are offered in conjunction with the State University of New York Upstate Medical University in Syracuse, and the Lake Erie College of Osteopathic Medicine (PA and FL campuses). Pre-Dental Early Assurance programs are offered in conjunction with the State University of New York at Buffalo School of Dental Medicine and LECOM School of Dental Medicine (Bradenton, FL). Pre-Pharmacy Early Assurance Programs are offered in conjunction with the State University of New York at Buffalo School of Pharmacy and LECOM School of Pharmacy (PA and FL campuses).

Joint Degree Programs

Canisius College has six- and seven-year joint degree programs with the following professional schools; University at Buffalo School of Dental Medicine, Lake Erie College of Osteopathic Medicine, University at Buffalo School of Pharmacy, LECOM School of Pharmacy, 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 dental, pharmacy, osteopathic, or optometric school. The DDS, DO, PharmD, OD or other appropriate professional degree will be awarded at the end of six or seven years. To remain in good standing, students must fulfill all requirements established by the professional school. University of Guelph Ontario Veterinary College has also reserved seats for Canisius students.

2015 – 2017 PRE-MED/HEALTH COURSES

HRP 101 Introduction to Health Professions **3 credits**

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. Prerequisite: None. *Fall*

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. Prerequisite: None. *Spring*

HRP 201/202 Topics in Health Professions Seminars **1-3 credits**

These seminars facilitate in-depth exploration of special topics in health and health care. The most recent seminars focused on Primary Care. Prerequisite: Permission of the Program Director. *Fall/Spring*

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 and competitive application to PEPID. *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. *Fall/Spring*

PROGRAM OF STUDY PRE-MED/HEALTH

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 new Medical College Admission Test (MCAT) exam that was implemented in 2015 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.

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 in Syracuse 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 during the freshman or sophomore year. Highly qualified students may be admitted to the LECOM joint seven-year (3+4) program upon enrolling at Canisius as freshmen. A six-year (3+3) primary care physician pathway is also available through LECOM. Students may also apply into the LECOM joint programs during the freshman year. Students in the LECOM programs with the appropriate academic indices are not required to take the MCAT.

Recommended Pre-Medical Courses

Recommendations include those courses needed to meet most medical school requirements and to prepare for the MCAT 2015 exam. 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 (FYS 101 and ENG 101) or the Honors Program equivalent.

Biology

At least one year of general biology with laboratory (BIO 111-112).

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories (CHM 111-112, CHM 227-228).

Biochemistry

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

Physics

One year of introductory physics with laboratory (PHY 201-202 or PHY 223-224).

Mathematics

Math requirements vary at the different medical schools. Many of the more competitive medical schools require one year of college level math. Some require calculus, some 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 109/110). Chemistry majors must take MAT 141.

Behavioral/Social Science

One semester each of psychology (PSY 101 or 102) and sociology (SOC 101). Some medical schools require more than two courses in the behavior/social sciences. The MCAT 2015 will include 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.

PROGRAM OF STUDY PRE-DENTAL

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.

Joint and Early Assurance Programs

Canisius College maintains relationships with University at Buffalo School of Dental Medicine and LECOM School of Dental Medicine (Bradenton, FL) which allow highly qualified students to gain early acceptance into dental school. Students may be admitted into the program upon enrolling at Canisius as freshmen (3+4 program with University at Buffalo, 4+4 program with LECOM). Students may also apply to the University at Buffalo program (4+4) during their sophomore year or apply to the LECOM program during the freshman or 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 (FYS 101 and ENG 101).

Biology

At least one year of general biology with laboratory (BIO 111-112).

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories (CHM 111-112, CHM 227-228).

Physics

One year of introductory physics with laboratory (PHY 201-202 or PHY 223-224).

Additional Pre-Dental courses may be needed depending on which schools students intend to apply to. Suggestions include:

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 102) and sociology (SOC 101). The behavioral science and humanities requirements vary at dental schools.

Biochemistry

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

Additional Biology

Some dental schools have additional biology courses such as microbiology (BIO 307) or anatomy and physiology (BIO 114 and/or 115) either required or recommended.

PROGRAM OF STUDY PRE-OPTOMETRY

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.

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.

Recommended Pre-Optometry Courses

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

English

One year of English composition (FYS 101 and ENG 101).

Biology

At least one year of general biology with laboratory (BIO 111-112).

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories (CHM 111-112, CHM 227-228).

Physics

One year of introductory physics with laboratory (PHY 201-202 or PHY 223-224).

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 111-112).

Psychology

One semester of psychology (PSY 101 or 102).

Social Science and Humanities

Two courses. Sociology (SOC110) is recommended.

Additional Pre-Optometry course suggestions include:

Biochemistry

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

Microbiology

One semester of microbiology (BIO 307).

Anatomy & Physiology

One semester of anatomy and physiology (BIO 114).

PROGRAM OF STUDY PRE-PHARMACY

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. Competitive students generally have a GPA of at least 3.3-3.5. 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.)

Joint and Early Assurance Programs

Canisius College has a seven-year (3+4) joint degree program with State University of New York at Buffalo School of Pharmacy and Pharmaceutical Sciences, 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 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 (FYS 101 and ENG 101).

Biology

At least one year of general biology with laboratory (BIO 111-112). 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 114-115). Many programs also require Microbiology with laboratory (BIO 307).

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories (CHM 111- 112, CHM 227-228). Many schools also require Biochemistry (BCH 301 or BIO 211-212)

Physics

One semester or one year of introductory physics with laboratory (PHY 201- 202 or PHY 223-224). 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 only 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.

PROGRAM OF STUDY PRE-VETERINARY

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. Students should participate in the local Veterinary Explorers organization.

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 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 (FYS 101 and ENG 101).

Biology

At least one year of general biology with laboratory (BIO 111-112).

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories (CHM 111-112, CHM 227-228).

Biochemistry

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

Physics

One year of introductory physics with laboratory (PHY 201-202 or PHY 223-224).

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 suggestions include: One semester of genetics (BIO 405) and one semester of microbiology (BIO 307).

PROGRAM OF STUDY
CATHOLIC STUDIES MINOR

INTERDISCIPLINARY MINOR IN CATHOLIC STUDIES

Director: Nancy M. Rourke, PhD

The Catholic Studies minor 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. Nancy Rourke (at 716-888-2460 or rourken@canisius.edu) in the Department of Religious Studies and Theology 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.

Structure of the Catholic Studies Minor

Course	Title	Credits
RST 231	Introduction to Catholic Studies (AS VI)	3
CTH 400	Research in Catholic Studies	3
One course in each of four areas:	Catholic Theology and Life Catholic Culture: Literature, Art, Music & Science Catholic History & Politics; and Catholic Philosophy & Social Thought – but no more than two courses from any one department in these areas.	12
	TOTAL (6 courses)	18

PROGRAM OF STUDY
CATHOLIC STUDIES MINOR

Courses that Fulfill Catholic Theology and Life

Course	Title	Credits
HON 359	Spiritual Autobiography	3
RST 230	Catholic Belief Today	3
RST 350 or HON 327	Christian Concept of God	3
RST 351	Freedom, Sin, and Grace	3
RST 352	The Church in the Modern World	3
RST 353	Seven Signs of Love	3
RST 354	Jesus Christ and Modern Culture	3
RST 399A	Christian Marriage	3

Courses that fulfill Catholic Culture: Literature, Art, Music and Science

Course	Title	Credits
ENG 233	Medieval Literature (for non-majors)	3
ENG 303	Medieval Literature	3
ENG 220	Contemporary American Catholic Fiction	3
ENG 330	The Bible as Literature	3
ENG 331	Irish Literature	3
FAH 213	Greek & Roman Art	3
FAH 224	Medieval Art	3
FAH 245	Renaissance Art	3
FAH 248	Baroque and Rococo Art	3
FAM 216	Medieval & Renaissance Music	3
FAM 220	Music from 1900 to the Present	3
HON 242	Portraits of Jesus	3
HON 328	Age of Michelangelo	3
RST 237	Images of Jesus in Art & Film	3
RST 314	New Testament in Literature/Art	3
RST 343	Religion & the Challenge of Science	3

Courses that fulfill Catholic History and Politics

Course	Title	Credits
CLS 308	Pagans & Christians	3
HIS 106	The Medieval World	3
HIS 131	History of Latin America to 1830	3
HIS 226	History of Ireland	3
HIS 306	The American Religious Experience	3
HIS 316	Reformation	3
HON 316	Famous Jesuits	3
RST 235	Religion and Politics	3
RST 325	Early Christianity	3
RST 328	The Jesuits: History, Spirituality and Culture	3
RST 329	Religions in North America to 1865	3

Courses that Fulfill Catholic Philosophy & Social Thought

Course	Title	Credits
HON 355	Religion's Public Role: Catholic Perspectives	3
PHI 267	Catholic Social Thought	3
PHI 302A	Medieval Philosophy	3
PHI 367	Advance Topics in Catholic 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 399C	Liberation Theologies	3
RST 399D	Catholic Concept of Conscience	3

PROGRAM OF STUDY
CATHOLIC STUDIES MINOR

**2015-2017 INTERDISCIPLINARY MINOR IN
CATHOLIC STUDIES COURSES**

RST 231 Introduction to Catholic Studies **3 credits**

Major movements and personalities in Catholic theology, history, culture, and spirituality. The Catholic worldview and its relation to society. (Field 1) Prerequisite: RST 101. *Fall/Spring*

CTH 400 Research in Catholic Studies **3 credits**

Independent study major capstone course in which a student does independent research and a project (such as a long research paper) on a person or topic of interest within the Catholic Studies minor under the supervision of a faculty advisor. The course may be waived in lieu of an internship or an agreement to complete such a project in conjunction with another relevant course's requirements. Prerequisite: Director's approval. *Fall/Spring*

Internships

May be done with special readings and reflection as an extra course for 3 credits or included within a project for CTH 400. Prerequisite: Director's approval.

PROGRAM OF STUDY ALL-COLLEGE HONORS

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 <http://www.canisius.edu/honors-program/index.dot>

Learning Goals and Objectives

For learning goals and objectives please go to <http://www.canisius.edu/honors-program/learning-goals/>

Qualifications

Admission to the All-College Honors Program is open to entering freshmen 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 Courses

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

The Honors curriculum includes English, Fine Arts, History, Literature, Philosophy, Religious Studies (2), Science/Math/Tech, Social Science, and Western Tradition I & II. 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.

Program Experiences

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 (separately) 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 *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.

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. Honors students are encouraged to study abroad and receive up to six hours of Honors credit for doing so.

PROGRAM OF STUDY
ALL-COLLEGE HONORS

Recommended semester schedule for Honors Program course requirements, except for Biology majors

Fall	Spring
Freshman	Freshman
HON 101 English HON 110 Western Tradition I Foreign Language	HON 111 Western Tradition II Foreign Language
Sophomore	Sophomore
1-2 Honors courses	1-2 Honors courses
Junior	Junior
1-2 Honors courses	1-2 Honors courses
Junior/Senior	Senior
HON 451 (Thesis)	1-2 Honors courses

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.

2015-2017 HONORS COURSES

HON 101 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.

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.

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.

HON 211 Masters of the Modern Mind: Marx, Nietzsche, and Freud **3 credits**
Careful study of major works by these seminal thinkers and an analysis of their influence on modern thought.

HON 216 Philosophy **3 credits**
Selected topics in philosophical inquiry, such as rationalism, empiricism, epistemology or metaphysics.

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.

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.

PROGRAM OF STUDY
ALL-COLLEGE HONORS

HON 221 Violence in America 3 credits

Considers the prevalence and persistence of violence in American society from the colonial period to the present. The topics range from murder, rioting, kidnapping, wartime atrocities, sexual assault, bank robbery, ethnic violence, blood sports, media coverage, labor unrest, terrorism, school shootings, and the death penalty.

HON 222 History & Literature of the 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.

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.

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.

HON 227 Vices and Addictions in American History 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.

HON 230 Economics of Public Issues 3 credits

Seeks to develop rudimentary economic principles and to use them to analyze an array of public policy issues, such as income inequality, environmental pollution, health care, education, and international trade.

HON 231 War and Peace since 9/11 3 credits

In exploring the nature of world politics and U.S. 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.

HON 232 American Government: A User Guide 3 credits

Politics matters. It will significantly impact everyone, regardless of career path. This course will provide the basic tools 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.

HON 237 Introduction to Latinos in the U.S. 3 credits

Focuses on race, ethnicity, and cultural variables in Latino literature from the mid-20th century to contemporary writers.

HON 239 Problems in American Modernism 3 credits

A multidisciplinary investigation of the problems and possibilities of American culture from 1900 to September 11, 2001. Employs a rich variety of texts from literature, architecture, art, history, sociology and film to analyze American responses to urbanism, war, economic depression, suburban development and contemporary terrorism.

HON 240 Old Testament: Cultures, Contexts, and Criticism 3 credits

Explores the texts of the Hebrew Bible and the people who wrote them in light of the cultural and historical setting. To understand these texts, archeological findings and parallel materials from other cultures will be examined.

HON 241 History of Judaism 3 credits

An introduction to the history, religion, and literature of Judaism from the Hellenistic period to the present.

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. We will conclude 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.

PROGRAM OF STUDY
ALL-COLLEGE HONORS

HON 245 Education and the Media 3 credits

This course looks at societal issues that have been influenced by the media and affect the American educational system. Among other topics, we will consider the uses of social networking in education, cyber-bullying, gangs and violence in the schools, and teaching for tolerance.

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.

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.

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.

HON 249 Magic, Science, and Religion 3 credits

This course will consider diverse ways that 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.

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.

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.

HON 307 New Perspectives on the Civil Rights Movement 3 credits

An interdisciplinary seminar on the Civil Rights Movement, addressing the forgotten movement in the North, the role of the media, rock & roll music, the Cold War, white southern supporters and Klansmen, competing approaches to nonviolence, little-known heroes, women activists, religion, and reinterpretations of Martin Luther King.

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.

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.

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.

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.

PROGRAM OF STUDY ALL-COLLEGE HONORS

HON 325 Art, Advertising, & Activism **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.

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.

HON 346 Mathematical Literature and Literary Mathematics **3 credits**

This course addresses writers who use constraints in self-conscious and creative ways to generate experimental literature and explore applications of mathematics to literature. Among other writers, we will investigate the Oulipo, a group founded to join the mathematician's delirium to the poet's logic.

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.

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.

HON 351 Biotechnology and Society **3 credits**

An examination of recent developments in biotechnology and how they have shaped contemporary society.

HON 353 Age of Robotics **3 credits**

Introduces students to important and innovative robot creations and explores the future of robotics through fact and fiction. Asks questions about the nature of cognition, and examines non-human intelligence through readings in psychology, computer science, and philosophy of mind. Hands-on experience with robots.

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.

HON 355 Religion's Public Role: A Catholic Perspective **3 credits**

Important contemporary social issues, such as poverty, a living wage, globalization, access to health care, and war and peace, will be presented from a Roman Catholic perspective. Materials from papal encyclicals and contemporary Catholic theologians, especially from the United States, will be used to learn about and evaluate these issues.

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."

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.

PROGRAM OF STUDY ALL-COLLEGE HONORS

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.

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 biographers.

HON 373 Living Writers **3 credits**

An examination of contemporary literature written by published authors who 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.

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.

HON 375 American Authors and Storytellers **3 credits**

Examines the challenges, anxieties, responsibilities, and hopes of American storytellers, authors, and writers. Race, class, and gender will be discussed regularly, since issues of identity are integral to understanding authorship and the dynamics of authority.

HON 377 Plantation Psychosis: The Plantation in World Literature **3 credits**

A study of 20th century novels, films, and essays that depict the experience of the plantation. We will discuss the socio-political questions of identity in a (post) colonial world

in terms of social role, religious practice, labor relations, and sexuality.

HON 378 Magic Realism **3 credits**

This course explores the "fantastic" narratives of a recent literary genre from the Caribbean called "magic realism," which blends magical elements with the real world in order to "render our reality believable." This literature has spread worldwide as a means of communication and protest for oppressed or underrepresented groups, including women, homosexuals, and the poor.

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.

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.

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.

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.

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.

THE URBAN LEADERSHIP LEARNING COMMUNITY (ULLC)

**Co-Directors: E. Roger Stephenson, PhD
and Christian Blum, 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 79 percent four-year graduation rate. 145 ULLC students have graduated since 2004, and currently there are 37 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 take a number of "Team Learning" courses, non-lecture courses in a range of disciplines. The TL courses are writing intensive and emphasize a number of "levels of engagement" with course materials to promote "mastery" through teamwork. 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, the Senior Reception, the Parent Reception and the Program Blog. All ULLC students participate in one or more internships either related or ancillary to their career plans.

In addition, ULLC students travel to the Shakespeare Festival in Stratford, Ontario, annually; they 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 Dr. Roger Stephenson (stephene@canisius.edu, 716-888-2655) or Dr. Christian Blum (blum2@canisius.edu, 716-888 2650)

EXTERNAL BUSINESS PROGRAMS

CANISIUS CENTER FOR PROFESSIONAL DEVELOPMENT

The Canisius Center for Professional Development, located at Corporate Parkway in Amherst, is dedicated to providing lifelong professional education, development of workforce talent and the promotion of education in our community. The Canisius CPD offers a wide array of business seminars, custom training, assessments, certification test preparation and signature programs. All programs offered by the CPD are taught by subject-matter experts including Canisius College faculty to provide impactful training and resources.

Training Seminars

Our cutting-edge business workshops are designed to develop great leaders regardless of role or experience. Led by our top-ranked college faculty and business experts, participating in these sessions will elevate the skills and leadership required to be successful in today's business climate.

People are a big part of our focus whether it is about the expertise we bring to bear or the solutions we provide to help leaders succeed. Our process enables the direction and actions necessary for teams to execute and deliver company goals and objectives. We focus on enabling leaders with skills that help transform their business.

Custom Solutions

The Canisius Center for Professional Development specializes in developing strategic solutions for organizations. Our partnerships are characterized by collaboration between the CPD faculty and industry leaders to provide our clients with impactful and inventive solutions that address their business challenges. We recognize that "one size does not fit all" and deliver solutions that will help achieve targeted business objectives.

What we do

We offer customized answers that address whatever the specific opportunity or challenge requires. Our solutions vary and have included the facilitation of strategic plans, implementation of cost saving process improvements, tailored leadership development and personalized executive and leadership coaching.

How we do it

Our experts will work with each client to:

- Determine the most impactful solution.
- Align on the desired goals and objectives.
- Collaborate on the process and required actions.
- Execute the plan.
- Follow up to ensure we are meeting our desired outcomes.
- Our success is your success – we are full partners in your progress.

What to expect

Performance improvements that make a difference with your people, process, and overall company results.

- Commitment – we ensure that our mutual goals are achieved.
- Flexibility – we tailor our solutions to your needs.
- Integrity – our standards and values are our first priority. We act with complete respect and confidentiality.
- Long-term relationship – once a project is completed, it does not end there. Our goal is to create and maintain a long term, trusted relationship with our clients.

To discuss how our training seminars and custom solutions can benefit your organization, contact the Center for Professional Development at 716-888-8490 or by email at cpdinfo@canisius.edu

EXTERNAL BUSINESS PROGRAMS

WOMEN'S BUSINESS CENTER

Director: Sara L. Vescio

Demerly Hall | 2365 Main Street | Buffalo NY 14214-2326 |
716-888-8280

Web: www.canisius.edu/wbc

Email: wbcinfo@canisius.edu

The Women's Business Center, located in Demerly Hall at the corner of Main and Leroy, was established to support the success of entrepreneurs and small business owners with a focus on, but not limited to, women in Erie County and surrounding areas 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.

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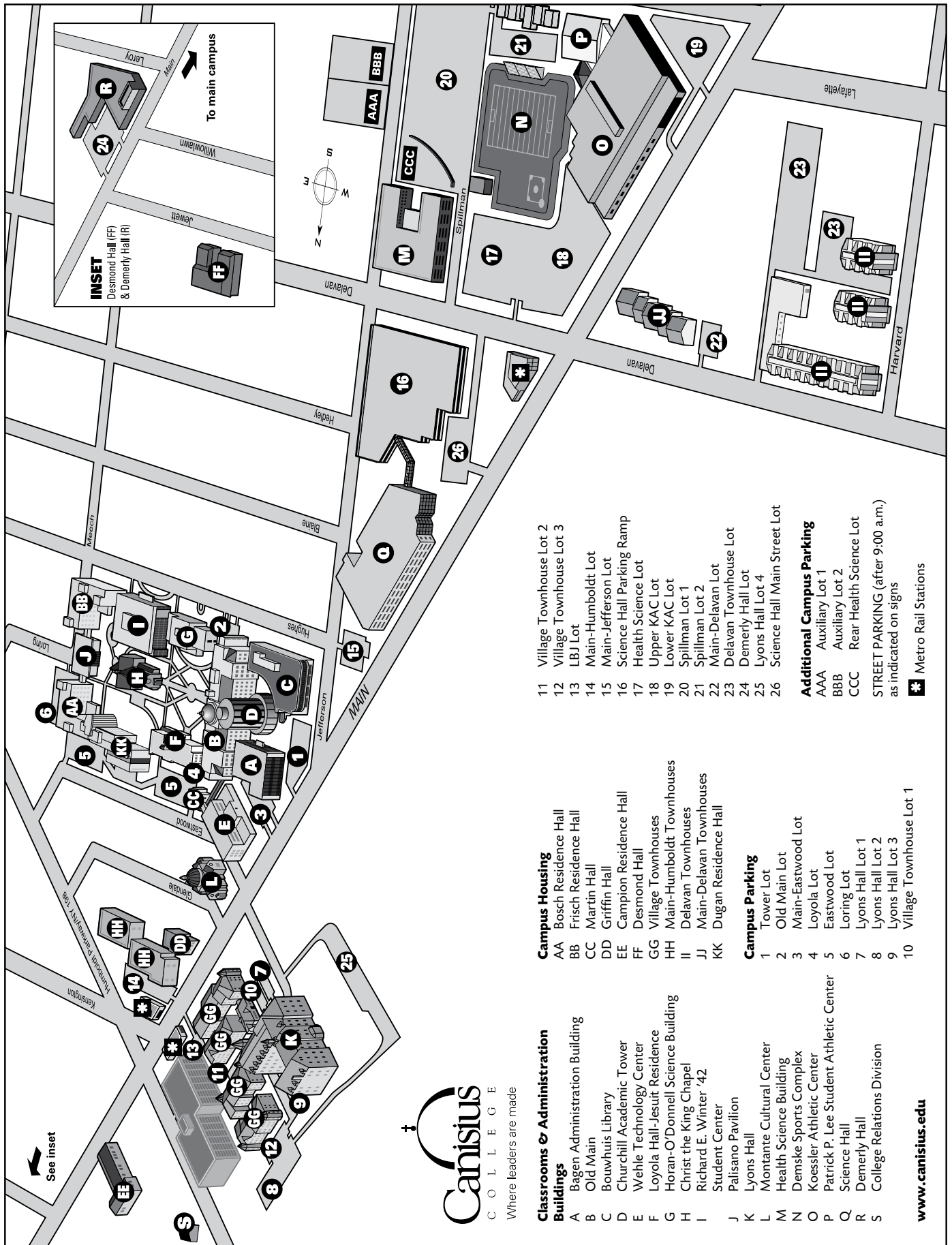
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* *Bene Merenti* – awarded for 20 years of
of service to Canisius College.

** *Special Bene Merenti* – awarded for
40 years of service to Canisius College.



Canisius
C O L L E G E

Where leaders are made

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 P. 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

Additional Campus Parking

- AAA Auxiliary Lot 1
- BBB Auxiliary Lot 2
- CCC Rear Health Science Lot
- STREET PARKING (after 9:00 a.m.) as indicated on signs
- ★ Metro Rail Stations

www.canisius.edu

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PUBLICATION OF THE OFFICE OF ACADEMIC AFFAIRS

Visit us on the World Wide Web at www.canisius.edu

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