



SUNY CANTON

2025-2026

**ACADEMIC
CATALOG**

ACADEMIC CATALOG

2025-2026



SUNY CANTON

34 Cornell Drive, Canton, New York 13617

OFFICE OF ADMISSIONS:

315-386-7123 / 800-388-7123

FAX: 315-386-7929

www.canton.edu / admissions@canton.edu



Academic Calendar 2025-2026

Please reference the following link for updated Academic Calendar information.



<https://www.canton.edu/academic/calendar/>

<https://www.canton.edu/media/pdf/Academic-Calendar-2024-28.pdf>

SUNY Canton does not discriminate based on race, color, national origin, sex, gender identity, disability, or age in its education programs, services, and activities, including employment policies and practices. The following people have been designated to handle all inquiries regarding non-discrimination policies:

**Affirmative Action, Equity, and Compliance
Coordinator/Director of Human Resources**

Joann Ellis
315-386-7325
hr@canton.edu

Title VI Coordinator
Lashawanda Ingram
315-386-7128
ingraml@canton.edu

Title IX Coordinator

Kaelee Shrewsberry
315-386-7050
title9@canton.edu

Section 504 Officer

Megan Riedl
315-386-7392
ADA@canton.edu

Student Complaint Process and SARA

SUNY Canton participates in the State Authorization Reciprocity Agreements (SARA). SARA's policies help protect students and provide benefits to both states and institutions carrying out distance education in multiple states.

SUNY Canton follows the complaint resolution policies and procedures outlined within the SARA Policy Manual and summarized on their webpage for SARA Student Complaints | NC-SARA. Consumer protection complaints resulting from distance education courses, activities, and operations may be submitted to SUNY Canton for investigation and resolution. Current or prospective students can submit a complaint to:

Courtney Bish
SUNY Canton
Miller Campus Center 229
34 Cornell Drive
Canton, NY 13617
315-386-7120
bish@canton.edu

Information on SUNY Canton's Complaint Procedure is located on the SUNY Canton complaint procedure webpage. If a student is dissatisfied with SUNY Canton's resolution, a concern may be submitted to System Administration of the State University of New York as outlined on the SUNY Office of University Life webpage for student concerns. And, if still not satisfied, a complaint may be submitted, within two years of the incident about which the complaint is made, to the New York State Education Department. Please note that this does not include complaints about grades or student conduct violations, which are to be fully addressed via campus processes, not through the NC-SARA complaint resolution procedures.

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CATALOG DISCLAIMER

Notwithstanding anything contained in this Catalog, SUNY Canton expressly reserves the right, wherever it deems advisable, (1) to change or modify its schedule of tuition and fees, (2) to withdraw, cancel, reschedule or modify any course, program of study, degree or any requirement in connection with the foregoing, and (3) to change or modify any academic or other policy. Please be advised that, due to printing deadlines, information in this Catalog may be outdated. Changes in information in this Catalog and new academic regulations, policies or programs will be published on campus and in each semester's registration materials. It is the responsibility of each student to ascertain current information that pertains to the individual's program, particularly with regard to satisfaction of degree requirements, through consultation with the student's advisor, the office of the student's dean, and other appropriate offices such as the Registrar or Financial Aid. In preparing this Catalog, efforts are made to provide pertinent and accurate information; however, SUNY Canton assumes no responsibility for Catalog errors or omissions.

SUNY Canton's Mission and Goals



Great Majors. Great Careers.

MISSION STATEMENT

SUNY Canton is dedicated to providing a progression of accessible, affordable, high-quality applied programs that enable students in the North Country, New York State, and beyond to achieve their highest potential both personally and professionally.

VISION STATEMENT

Educating the leaders of tomorrow for careers in the global technological economy.

VALUES STATEMENT/DISTINCTIVE IDENTITY

We Value...

A Student-Centered Philosophy... by keeping students' best interests at the center of everything that we do.

Excellence... by challenging everyone to perform at a consistently high level through continuous quality improvement.

Integrity... by treating others with honesty and respect during every interaction.

Success... by creating an environment that encourages maximum personal and professional growth and helps students translate that growth into meaningful action.

Diversity... by fostering a culture of inclusiveness that values individual differences, gives voice to all in the campus community, promotes the free exchange of ideas based on merit, and encourages a global perspective.

Access... by offering affordable career-oriented public higher education to motivated, mature and disciplined students through innovative delivery methods.

Sustainability... by implementing viable long-term options for resource usage, disaster management, transportation, and waste management in connection with all campus activities and weaving sustainability concepts throughout the curriculum.

Flexibility... by embracing change to better address the needs of the college community and society at large.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

The Institutional Student Learning Outcomes (ISLOs) represent the knowledge, skills, and attitudes students will develop as a result of their education experience at SUNY Canton. Upon completion of a degree program at SUNY Canton, students will have competency in five areas:

1. Communication Skills
2. Critical Thinking
3. Foundational Skills
4. Social Responsibility
5. Industry, Professional, Discipline-Specific Knowledge and Skills

ISLO	Definition
1. Communication Skills <i>(all subsets required for programs)</i>	The category of communication skills requires students to demonstrate competency in both oral and written expression, including a basic understanding of discourse contexts and appropriate use of style and necessary writing technologies.
Oral	Students demonstrate or share knowledge to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors through a prepared, purposeful, communicative act.
Written	Students develop and express ideas in writing. This written communication involves learning to work in many genres and styles. It can also involve working with many different writing technologies, and mixing texts, data, and images.
2. Critical Thinking <i>(one of three subsets required for programs)</i>	The category of critical thinking requires students to demonstrate competency in formulating conclusions as a result of exploration, evaluation, and analysis. Students will explore, evaluate, and analyze objects, subjects, and phenomena.
Critical Analysis	Students demonstrate a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.
Inquiry and Analysis	Students demonstrate a systematic process of exploring issues/objects/works through the collection and analysis of evidence that result in informed conclusions/judgments (inquiry) and demonstrate the process of organizing complex topics or issues into parts to gain a better understanding of them (analysis).
Problem Solving	Students design, evaluate, and possibly implement strategies to answer an open-ended question or achieve a desired goal.
3. Foundational Skills <i>(all subsets required for programs)</i>	The category of foundational skills requires students to demonstrate knowledge in information management, basic math skills as required by disciplinary standards, and skills associated with their discipline.
Information Management	Students perform the basic operations of personal computer use to understand and use basic research techniques; and locate, evaluate and synthesize information from a variety of sources.
Quantitative Literacy & Reasoning (QLR) (Requirement filled by GER 1)	Students demonstrate competency in working with data. Individuals with QLR skills will possess the ability to reason and solve quantitative problems from a wide array of contexts. Students will be able to create arguments supported by quantitative evidence, accurately communicate those arguments in a variety of formats (e.g. using words, tables, graphs, mathematical equations, etc., as appropriate), and check the results for reasonableness and accuracy.
4. Social Responsibility <i>(two of four subsets required for programs)</i>	The category of social responsibility requires students to demonstrate understanding of cultural relations and global concerns. Students should demonstrate cultural sensitivity and global concerns with an emphasis on ethical standards.

Ethical Reasoning	Students demonstrate the ability to assess their own and others' ethical values and the social context of problems, recognize ethical issues in a variety of settings and contexts (which could include cultural, historical, or professional contexts), think about how different ethical perspectives might be applied to dilemmas, and consider the ramifications of decisions and actions.
Global Learning	Students critically analyze and engage with complex, interdependent global systems and legacies (natural, physical, social, cultural, economic, or political) and explore their implications for people's lives and the earth's sustainability.
Intercultural Knowledge	Students demonstrate knowledge that supports effective and appropriate sensitivity to, and interaction in, a variety of cultural contexts.
Teamwork	Students exhibit behaviors that facilitate teamwork and collaboration as demonstrated by effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to team discussions.
5. Industry, Professional, Discipline-Specific Knowledge and Skills	The category of industry, professional, and discipline-specific knowledge and skills requires students to demonstrate the knowledge and skills necessary to succeed as leaders of tomorrow in their chosen career path.



COLLEGE GOALS

- Offer programs in business, public service, health, liberal arts and engineering technologies that prepare students to enter rewarding careers and continue their education.
- Deliver a program of general education which provides a broad set of coherent and focused educational experiences aimed at enabling students to acquire knowledge and skills that are useful and important for all persons.
- Provide a community that enhances the development of leadership skills and creativity; encourages intellectual, ethical, and cultural growth; promotes an appreciation of our multicultural society; and advocates physical and emotional well-being.
- Promote excellence and innovation in teaching, advance scholarship and research, encourage continuous curricular evolution, and integrate technology into educational experiences.
- Design and implement extended and alternative programs to address the needs of national and international students, businesses, government agencies, and other specialized audiences.
- Advance the institution through philanthropic activities, external funding and cultivation of strong alumni relations.



About SUNY Canton

The State University of New York at Canton is a public, coeducational, residential college located on a spacious campus along the banks of the Grasse River. Its northern location places SUNY Canton close to the Adirondack Mountains, the St. Lawrence River, and major Canadian cities such as Ottawa and Montreal.

ACADEMICS

SUNY Canton is Northern New York's four- and two-year college for technology, health, management and public service. SUNY Canton offers more than 50 majors leading to bachelor's degrees, associate degrees, and one-year certificates. Numerous articulation agreements with other institutions provide further opportunities in fields such as business administration, forestry and medicine. Graduates of two-year programs are encouraged to enroll in bachelor's degree programs or begin their careers immediately.

SUNY Canton's 3,200 students are taught by faculty who have both outstanding academic credentials and excellent technical experience. Most have on-the-job professional experience, are licensed in their fields, and are current practitioners in their professions.

CAMPUS ENVIRONMENT

Academic facilities include numerous classroom buildings containing many specialized labs for practice in technology-based disciplines. The Learning Commons, includes the Southworth Library, Betty J. Evans Tutoring Center, Information Services Helpdesk, and the Cyber Café. The Learning Commons is a resource-rich hub for innovation, collaboration, and engagement that provides the campus community with access to resources, technology, and services that promote teaching and learning. The Learning Commons strives to create access to resources, program, and support for all students both on-campus and virtually. The Computer Center provides access

for all students in open computer labs and networked computer classrooms. Students receive an email account and can access the Internet in computer labs or via wireless network access in most areas of campus, including all residence hall rooms.

The College opened a \$42 million athletic facility in July 2011. The massive building includes an ice arena, fitness center, basketball courts, field house, and swimming pool. Other additions include a synthetic turf field and a baseball field. SUNY Canton has expanded its sports offerings and has recently added women's volleyball, men's and women's golf, women's ice hockey, women's lacrosse and men's lacrosse. That brings the total number of sports teams to 15, including men's and women's basketball, cross country, soccer, men's ice hockey, softball and baseball. The Kangaroos are a Division III NCAA member.

Kennedy Hall is the name of the new 305-bed, apartment-style residence hall on campus. It opened in August 2011 and features all single rooms in three, four, and five bedroom suites.

The four existing residence halls have also undergone renovations and house 950 students in single rooms, doubles, triples and suites. Special theme floors allow students to select living and learning options best suited to their interests. There's even a residence hall that allows small pets. Chaney Dining Center provides meals for residential students, and snack bars located around the campus make it easy to grab a quick bite to eat.

There are numerous student clubs, and the Richard W. Miller Campus Center serves as the hub for a wide range of cultural and recreational activities. Since the campus is located in a residential community that welcomes college/community interaction, students find that SUNY Canton provides a fine blend of college learning and community involvement.

Many SUNY Canton alumni pursue careers in the technologies. Two-thirds

of each graduating class choose to enter productive careers directly after graduation. Each year, nearly 100 percent of these graduates are successful in finding jobs for which SUNY Canton prepared them.

CAMPUS HISTORY

Originally founded in 1906 as the School of Agriculture (SOA) at St. Lawrence University, SUNY Canton was the first postsecondary, two-year college in New York authorized by the Legislature. In 1941, SOA was renamed the New York State Agricultural and Technical Institute (ATI). ATI became a member college of the State University of New York in 1948. To recognize advanced technology programs added in the 1950s and '60s, the College underwent another name change in 1965, this time becoming the State University of New York Agricultural and Technical College at Canton or ATC. In 1987, the University's Board of Trustees authorized yet another name change to the College's present designation as State University of New York College of Technology at Canton.

In 1997, SUNY Canton received bachelor's degree granting approval from the SUNY Trustees and the Governor of New York State. Since then, more than 20 bachelor's degrees have been approved, and several others are in development.

LOCATION

The village of Canton is situated in the St. Lawrence Valley near the northern foothills of the Adirondack Mountains and the scenic Thousand Islands. The location is perfect for those who enjoy outdoor activities, which range from camping, boating and hiking to cross-country and downhill skiing. Lake Placid, site of the 1980 winter Olympics, is less than two hours away and offers a multitude of activities throughout the year. For those who wish to have a more metropolitan experience, Montreal and Ottawa are approximately two hours

north across the Canadian border. These two cities provide a variety of attractions for shopping, plays and concerts as well as beautiful parks and recreational facilities.

The College is located on the outskirts of the village along the Grasse River, which adds to its beauty and relaxed atmosphere. The village is a short walk from campus and offers several unique shops and restaurants.

ACCREDITATIONS

SUNY Canton is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104-2680 — Telephone (267) 284-5000, Fax (215) 662-5501. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

The Air Conditioning Engineering Technology, Civil Engineering Technology, Electrical Engineering Technology, and Mechanical Engineering Technology programs are accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET.

The Veterinary Science Technology program is accredited by the American Veterinary Medical Association. The Accreditation Commission for Education in Nursing has accredited the Nursing, AAS program. The Physical Therapist Assistant program is accredited by the Commission on Accreditation in Physical Therapy Education. The Dental Hygiene, AAS program is accredited by The American Dental Association (ADA), Commission on Dental Accreditation (CODA). The Automotive Technology program is certified by the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE).

The Sports Management program is accredited by the Commission on Sports Management Accreditation (COSMA).

The Funeral Services Administration Bachelor's Degree program at State University of New York - Canton is accredited by the American Board of Funeral Service Education (ABFSE), 992 Mantua Pike, Suite 108, Woodbury Heights, NJ 08097 (816) 233-3747. Web: www.abfse.org.

National Board Examination pass rates, graduation rates, and employment rates for this and other ABFSE-accredited programs are available at www.abfse.org. To request a printed copy of this program's pass rates, go to the office of the FSAD Program Director, Cook 109 or by email at penepentd@canton.edu, or by telephone 315-386-7170.



ASSOCIATED COLLEGES OF THE ST. LAWRENCE VALLEY

SUNY Canton is a member of the Associated Colleges of the St. Lawrence Valley, a consortium that also includes Clarkson University, SUNY Potsdam, and St. Lawrence University. The Associated Colleges, with approximately 12,500 students in two villages 11 miles apart, expands opportunities through such activities as cross-registration for courses at the other three campuses, coordination of social events, and library privileges at all four college libraries.

ALUMNI ASSOCIATION

The Alumni Association is dedicated to developing, cultivating, and promoting enduring bonds between alumni and students, faculty, staff, and the campus community through mission-driven communication, networking, and event opportunities.

The Association works with the Canton College Foundation in encouraging individuals to provide financial support for a variety of college activities. As a result of these efforts, funds can be provided for student scholarships and emergency loans, faculty research and special projects, and other activities in need of financial support.

ALUMNI BOARD OF DIRECTORS

FERGAL J. FOLEY '80, President,
Murrells Inlet, SC

KELLY C. OBERMAYER '79, Vice President,
Sykesville, MD

ANNE H. BOULTER '79, Secretary,
Watertown

WILLIAM BLASKO '99, Holly Springs, NC

ANN-MARIE BREWER '85, Fine

JENNIE H. FLANAGAN '90, '93, '06,
Hermon

RICHARD J. GILCHRIST '10, Canton

CAROLINE C. KINGSEPP '09, Clifton Park

JOHN G. MAINES '77, Henderson, NC

WILLIAM A. MYERS '86, Hermon

JEFFREY R. NOCE '87, Syracuse

MAURIZIO M. PANICONI '18, Cornelius,
NC

DEVINE A. PEARSON '17, Brooklyn

JONATHAN T. PINCKNEY '18, Canton

DR. ZVI SZAFRAN, Canton, ex officio

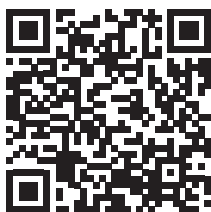
GEOFFREY C. S. VANDERWOUDE,
Potsdam, ex officio

STEVEN F. WOZNIAK '09, Selkirk

ADMISSION TO CANTON

Admission to the State University of New York at Canton is based on the academic and personal qualifications of applicants and is made without regard to sex, age, race, color, creed, national origin, sexual orientation, military status, or disability of individuals. Admission will be offered to qualified applicants whose academic preparation and experience indicate a foundation for success in their chosen curricula.

Candidates for admission to SUNY Canton must have earned a high school diploma with a preferred minimum 75 cumulative average or a high school equivalency (GED/TASC). Please review the academic program requirements listed for each program at <https://www.canton.edu/academics/prerequisites.html>.



All admissions decisions are subject to the discretion of the Executive Director of Enrollment. For students needing preparatory courses before being admitted to a program of interest, it may be necessary to extend the time needed to earn a degree or certificate.

Admitted students will be required to submit a \$50 enrollment deposit, which is refundable if students withdraw prior to May 1st. Students admitted after May 1st for the fall semester are allowed to request an enrollment deposit refund within 30 days of the date of their letter of admission. The preferred deposit deadline for the spring semester is January 1st. Students withdrawing their application before January 1st will have their deposit refunded upon request. Students admitted after January 1st for the spring semester are allowed to request an enrollment deposit refund within 30 days of

the date of their letter of admission.

Degree seeking students must declare a major by the end of two full-time semesters or the completion of 30 credits.

For more information, contact the Office of Admissions at 315-386-7123, 800-388-7123, or www.canton.edu.

DEGREES OFFERED

The College offers the opportunity for students to earn the degrees of Bachelor of Technology, Bachelor of Business Administration, Bachelor of Science, Associate in Applied Science, Associate in Science, Associate in Arts, Associate in Occupational Studies, or a Certificate of one-year study. Many of our programs allow for a fall or spring start. A very select few allow for a summer start. Contact the Office of Admissions for details.

ADMISSION INTERVIEWS

Prospective students and their families are strongly encouraged to visit the campus in-person or virtually to discuss college plans with an admissions counselor. In-person or virtual interviews help to show your level of interest in SUNY Canton and can be very helpful in making admissions decisions. Admissions interviews are offered Monday through Friday, as well as at Open Houses on select Saturdays. The interview provides an opportunity to discuss curricula and career choices, college life, and financial aid. All visiting students and their families will be offered a tour of the campus. Tours are offered regularly at 10 a.m., 12 p.m., and 2 p.m., Monday through Friday. Visit www.canton.edu/admissions/visit_us.html or call 800-388-7123 to schedule a visit.

HOW TO APPLY FOR ADMISSION

An application for admission may be completed online at www.canton.edu/apply. We accept the SUNY Application

or the Common Application. In addition to the application form, applicants must submit all secondary school transcripts, showing date of graduation. For students who have earned a General Equivalency Diploma (GED) or Test Assessing Secondary Completion (TASC), proof of graduation is shown through submitting a copy of your diploma page. When applicable, send all previous official college transcripts to the Office of Admissions at SUNY Canton. Official transcripts can be sent electronically or by mail. However, they must come directly from the issuing institution in order to be considered official. Send electronically to admissions@canton.edu or by mail to SUNY Canton, Office of Admissions, 34 Cornell Drive, Canton, NY 13617. SUNY Canton will be test optional for applicants applying for the fall 2022 or spring 2023 semesters.

All applications are processed on an individual basis and additional information may be requested by the Office of Admissions to make a fair assessment.

WHEN TO APPLY FOR ADMISSION

Prospective students are encouraged to submit their application before December 1 for the fall semester and November 1 for the spring semester. Decisions with respect to admission are made on a rolling basis, unless otherwise specified. Our Nursing, Physical Therapist Assistant, Practical Nursing, Veterinary Science Technology, and Veterinary Technology programs are selective and we very much encourage students applying to these programs to submit their applications before the selective program priority deadlines of February 1 for the fall semester and December 1 for the spring semester. Candidates for admission to the spring semester should contact the Office of Admissions for the listing of available spring-start programs.

ADMISSION AS FRESHMEN

Candidates for admission to the College must meet the following minimum requirements:

1. Be a graduate of a secondary school accredited by its State Education Department, hold a high school equivalency diploma, or meet certain home-school criteria.
IEP diplomas are not considered. Students with an IEP diploma must pass a high school equivalency.
2. Have completed, with a satisfactory level of achievement, the minimum course prerequisites for the curriculum selected.
3. Demonstrate academic preparation necessary for success in the curriculum selected.

The most important criterion for admission as freshmen directly from high school is the secondary school record (grade point average, pattern of course work, etc.). Some candidates will be asked to submit additional criteria, such as an essay, personal statement, or resume.

The Office of Admissions reserves the right to request additional information, and applicants may, of their own accord, submit additional supportive documents.

HOME-SCHOOLED STUDENTS

Home-schooled students must provide supplemental materials as part of their application for admission to SUNY Canton.

Students of compulsory school age must provide one of the following

1. A high school diploma from an accredited state secondary school.
2. Letter from Superintendent of Schools certifying that the student has completed the substantial equivalent of a four-year high school course.

Students beyond compulsory school age must provide one of the following:

1. Option #1 as stated above.
2. Option #2 as stated above.
3. Passing score on a high school equivalency (TASC/GED).
4. Proof of passing and completing all requirements for the required five Regents examinations or approved alternative assessments for these examinations. (However, you will be ineligible for financial aid.)
5. Completion of 24-credit hour program in accordance with 8 NYCRR Section 3.47 for Earned Degrees. (However, you will be ineligible for federal financial aid.)
6. Proof of previously earning and been granted a degree from a degree-granting institution.

ONLINE CORRESPONDENCE HIGH SCHOOLS

New York State does not approve correspondence study, including online, as equivalent to a high school diploma for New York State residents. Correspondence study and online diplomas are not valid for students who were New York State residents at the time they received the online diploma. New York State school districts are prohibited from recognizing correspondence or online programs of high school study as fulfilling the New York State requirements for completion of an approved course of high school study.

New York State residents who have attained a high school education/diploma through an online correspondence high school are not eligible to receive:

- New York State Tuition Assistance (TAP), Excelsior Scholarship, STEM Scholarship, TeachNY scholarship, 9/11 scholarship.
- Many Federal financial aid programs.
- An associates or bachelor's degree from a private or public college or university located within New York State.

New York State residents may acquire recognized high school graduation through the following options:

- Successful completion of the New York State TASC(GED) exam;
- Successful completion of the 24-credit hour program in accordance with 8 NYCRR Section 3.47;
- Successful completion of either the Accuplacer or CELSA Ability to Benefit test.

Questions regarding correspondence and online high school diplomas should be directed to:

**New York State Education Department
High School Equivalency Office
PO Box 7348
Albany, New York 12224
(518) 474-4906**

Out-of-state residents should refer to the policies.

PLACEMENT TESTING

The ACCUPLACER placement test may be required for scheduling purposes after acceptance into SUNY Canton. This decision is based on standardized test scores such as Regents exams, final course average, ACT or SAT scores, or certain program demands. Transfer students must demonstrate a "D" or better in a college-level English course to be exempt.

Students who are required to be tested will be notified via their college email and in their student portal via the New Student Checklist. Placement testing must take place prior to advising. For details and practice test items, go to www.canton.edu/testing. For more information, call 315-379-3954.

ADVANCED PLACEMENT AND PROFICIENCY EXAMINATION CREDIT

SUNY Canton has a proficiency examination program to serve students who

seek recognition for achievement acquired outside the conventional college classroom. Admission with advanced standing may be granted on the basis of satisfactory completion of College-Level Examination Program (CLEP) Subject Examinations, the Advanced Placement Program, both administered by the College Entrance Examination Board, the DSST Examination (formerly Dantes), and the International Baccalaureate (IB) examinations. Further, the College participates in selected Excelsior College Examinations (ECE) sponsored by the New York State Education Department. Interested students should check with the Office of Admissions regarding credits awarded for these examinations. For a listing of how CLEP, AP and IB exams are utilized, see: http://www.canton.edu/career_services/docs/Exam_Reference_Guide.pdf

HONORS PROGRAM

The purpose of SUNY Canton's Honors Program is to attract and retain academically gifted students who are interested in pursuing knowledge and experience beyond the standard expectations of their degree. The Honors Program rewards hard working students by providing additional opportunities and privileges to facilitate academic and personal growth.

All Honors Program students are required to abide by the following requirements:

- Remain aware of Honors Program information by checking email, Brightspace, Honors Webpage, and attending meetings during the academic year
- Maintain a minimum cumulative 3.25 GPA.**
- Complete a minimum of five Honors Courses for students enrolled in a four-year degree program.***
- Complete a minimum of three Honors Courses for students in a two-year degree program.**
 - o In order for a non-honors course (with a minimum of 3 credit hours) to be credited as an honors course, students will be required to complete honors projects that comprise research,

writing, and presentation components.

- o Up to three courses or 9 hours of honors course credit (or equivalent) can be transferred in from another college. Honor transfer credit to be approved by Honors Committee
- Attend Honors Program meetings and participate annually in the Scholarly Activities Celebration or other sanctioned event.
- Present (poster or oral) at Scholarly Activities Day, Honors Symposium or some other approved forum (i.e. academic conference):
 - o 2 times for four-year degree
 - o 1 times for two-year degree
- Provide evidence of participation in community service, academic/scholarly activities or awards, and campus involvement outside of coursework. Students must be involved in:
 - o At least one school related group (club, organization, tutoring service, etc.) OR
 - o Community service effort or organization that is on volunteer bases OR
 - o Scholarly activity, such as an ongoing research project with a faculty advisor
- A student should inform the Honors Program Director whenever their address (including phone number and email) or academic major changes.

For more information about Honors Courses, please refer to the Honors Webpage at www.canton.edu/honors/.

ADMISSION PROCEDURES AND REQUIREMENTS FOR INTERNATIONAL STUDENTS

An application for admission may be completed online at www.canton.edu/ apply. We accept the SUNY Application or the Common Application.

In addition to the application form, applicants must submit secondary school transcripts (translated to English), and all previous college transcripts (must be trans-

lated to English, SpanTran preferred), to the Office of Admissions at SUNY Canton. The application fee is \$50.00 (USD) and is non-refundable. This fee may not be waived for any reason. In the interest of time, it is recommended that the fee is paid by credit card when an online application is submitted.

An English Proficiency Exam is required if English is not your first language. Students must demonstrate English Proficiency in one of the following five ways:

TOEFL (School Code 2523)

61 Internet Based Test

500 Paper Based Test

173 Computer Based Test

IELTS

6.0 Minimum

5.5 minimum in each subsection of exam

iTEP

3.5 Minimum

PTE Academic

44 Minimum

College Level English Course

Must receive a grade of "C" or better (US Grade)

Students who are interested in SUNY Canton who do not meet English Proficiency requirements can apply for conditional admission in which they will enroll in the ESL program at Fulton Montgomery Community College (FMCC) for a period of time based on their level of proficiency. Once they have successfully completed the program, they will be offered full admission to SUNY Canton. Students must meet all other admission requirements at SUNY Canton to qualify for conditional admission.

For full consideration for Fall admission, the application must be submitted no later than April 1st. All required materials must be submitted by July 1st. If applying for Spring admission, the application must be completed no later than November 1st. All required materials must be submitted by December 1st. It may take several months to obtain the appropriate visa, so it is recommended that students apply for

admission as early as possible. Additional supporting documents, such as a colored copy of the biography page of a valid passport, the Foreign Student Financial Statement (FSA-4) and supporting financial documentation will be required upon admission in order to obtain an I-20. These forms must be completed and certified by the appropriate financial institution. Please make sure the form is accurate and signed in all appropriate places to avoid delays with the I-20 processing. The application will be reviewed when all required information is received.

All documents can be emailed to admissions@canton.edu or sent to Office of Admissions, SUNY Canton, 34 Cornell Drive, Canton, NY 13617-1098, USA.

TRANSFER STUDENT ADMISSION

Applicants who have previously enrolled or taken at least one class at another institution after high school graduation, are considered transfer students. In addition to completing the application for admission, transfer students must also submit an official transcript from every college or university previously attended. Transfer students who have earned less than 24 college credit hours at the time of application will be required to submit their official high school transcript. However, we encourage all transfer students to submit their high school transcript for financial aid requirements. Lack of an official high school transcript on record with SUNY Canton may result in the loss of a financial aid opportunity. Transfer students must meet specific GPA and credit hour requirements for their program of application. All degree programs have specific requirements for admission. Transfer students should contact the Office of Admissions for further information at 1-800-388-7123.

For all transfer students, equivalency credit for coursework shall be determined by the Coordinator of Transfer Services. A preliminary evaluation notice will be sent

via email and credits will be viewable in DegreeWorks. Students are encouraged to contact transfer@canton.edu with any subsequent questions or concerns regarding their evaluation. Courses completed at another institution transfer only as credits, quality points do not transfer. A letter grade of "D" or better is required for credit, unless specifically stated otherwise.

The Office of Admissions reserves the right to request additional information, and applicants may, of their own accord, submit additional supportive documents.

READMISSION

Students are considered to be readmits if they meet one of the following criteria: (1) have not attended classes as a matriculated student at SUNY Canton for at least one semester, have not been granted an official leave of absence, and have not attended another college; (2) have graduated and have not attended another college since graduation.

Students must complete a Readmission Application available online at www.canton.edu/admissions/readmission.html

Readmit Academic Requirements

TO RE-REGISTER FOR SEMESTER:	COMPLETED HOURS (EARNED HOURS) ¹	CUMULATIVE GPA
2	9	1.25-1.49
3	18	1.50-1.74
4	27	1.75-1.99
5	39	2.00
6	51	2.00
7	63	2.00
8	75	2.00
9	90	2.00
10	105	2.00

¹At the discretion of the appropriate school dean, imputed credit hours may be used in determining a student's academic status.

CREDIT FOR PRIOR LEARNING FROM OTHER INSTITUTIONS OF HIGHER LEARNING

Applicants for admission who have attended other institutions of higher learning may be admitted with advanced standing depending upon the courses completed and grades earned. Applicants for advanced standing should apply for admission in the same way as other applicants; but in addition, they must request the Registrar of all institutions of higher learning which they have attended to forward official transcripts of work completed to the College. SUNY Canton accepts credit for courses transferred with a grade equivalent to a "D" or above at SUNY Canton. Prior credits which apply to an earned Associate's degree, including grades of "D" and above, will be accepted in transfer and may be applied towards the total credits for a SUNY Canton bachelor's degree. This policy may exempt credits received in the core curriculum when program specific grade requirements supersede this policy.

The College has formalized articulation agreements with a number of higher education institutions. A complete listing of current transfer agreements may be found on the college website at www.canton.edu/admissions/transfer/agreements.html. Acceptance of satisfactorily completed credits taken at the prior institution is guaranteed upon transfer to SUNY Canton as specified in the applicable transfer agreement. Credit is awarded at the discretion of the School Dean.

Upon readmission, any new non-degree credit with a grade of D or better from a different institution of higher learning will be evaluated for transfer credit.

BY PROFICIENCY EXAMINATION

A complete Reference Guide to Earning College Credit by Examination may be found on the college website at

www.canton.edu/career_services/docs/exam_reference_guide.pdf.

1. Published Examinations: Admission with advanced standing may be granted on the basis of satisfactory completion of published proficiency examinations. The College participates in the College

Level Examination Program (Subject Examinations) and the Advanced Placement Program; the DSST examination (formerly DANTES); the International Baccalaureate (IB) examinations; and the Regents College Proficiency Examination Program sponsored by the New York State Education Department. Further, the College participates in selected Excelsior College Examinations (ECE).

2. Locally Developed Examinations: At the discretion of the school or departmental faculty, advanced standing may be granted for satisfactory completion of proficiency examinations developed by the College faculty and in accordance with the following policy:

- a. Locally designed and administered exams are available only to students who are matriculated at SUNY Canton or are participating in a CREST "Career Ready Education and Success Training" program or course.
- b. Such exams will consist of written and/or practical application tests as deemed appropriate.
- c. Any credit earned via such examinations will not be (a) counted as residency credit, included on official enrollment reports unless requested specifically, (c) included in a faculty member's reported workload, and (d) used in calculating the campus FTE credit report.
- d. Any credit earned must fulfill degree requirements or be related to a CREST course that could fill a degree requirement.
- e. Such exams will be administered prior to a student's enrollment in the equivalent course for which a proficiency exam is requested or at the end of a CREST course.
- f. Satisfactory completion of a locally designed and administered proficiency exam will be recorded on the student's transcript follow-

ing evidence of progress toward an educational objective. In the case of CREST course, successful completion will be recorded on the student's transcripts for possible future use toward an educational objective.

- g. A student is not permitted to enroll in or repeat the equivalent course for which a proficiency exam has been satisfactorily completed.
- h. A student may not repeat the proficiency exam administered for a specific course or portion thereof if not satisfactorily completed.
- i. Proficiency exams shall be approved by the appropriate academic department and School Dean. Copies of all locally designed proficiency examinations will be placed on file with the Vice President for Academic Affairs and the appropriate School Dean.
- j. Forty dollars (\$40) per credit hour will be charged for all locally designed and administered proficiency examinations.

FROM SECONDARY SCHOOL

The College may grant credit for selected courses completed at the secondary level. Transfer credit will be conditional upon evaluation of in-kind courses and experiences by the appropriate Dean of the School in which the credit will be granted. Approved secondary course work will match or exceed that offered on campus. The course must be subject to an articulation agreement. Students requesting credit must demonstrate superior performance and have the recommendation of the appropriate secondary school faculty member and endorsement of the high school principal.

PRIOR LEARNING NOT THE RESULT OF CREDIT-BEARING ACTIVITIES

Credit for Prior Learning may be granted to students enrolled in any program, at the

discretion the appropriate Dean of the School in which the program is located.

NOTE: Students may apply for Prior Learning Credit for a course only if a proficiency exam or a CLEP exam does not exist for that course.

NOTE: Credit for Prior Learning cannot be granted for courses in which the applicant has ever been enrolled in at SUNY Canton.

The maximum number of Prior Learning credit that may be applied is 15 credit hours for an associate degree and 30 credit hours for a baccalaureate degree. Such credit will be evaluated according to the following procedure:

1. The student must apply for Prior Learning Credit during the first year of matriculation in the program. Applicants must complete the Application for Prior Learning Credit and submit the form to the Dean of the School in which the program is located.
2. The Dean, in consultation with other Deans as appropriate, will arrange for a Prior Learning Credit Advisor selected from the School's faculty to assist the students in preparing the necessary documentation in support of the number of credits requested. The portfolio must clearly evidence mastery of a preponderance of the learning outcomes as listed in the course out-line(s) in order for a request to be viable.
3. The student will submit a formal letter of request and a portfolio containing all documentation and pertinent adjunct supportive material to the Prior Learning Credit Advisor within the first ten weeks of the student's second matriculated semester. The student will be notified of the decision within five weeks after submitting the portfolio.
4. The portfolio will be evaluated by one or more faculty members recruited by the Dean as content reviewers.
5. The Prior Learning Credit Advisor will provide the content reviewer(s) with

a copy of the most recent appropriate course outline(s), including detailed learning objectives.

6. The content reviewers will submit their recommendations to their Dean. The Prior Learning Credit Advisor can serve as one of the content reviewers.
7. Following the decision of the Dean, a notice will be forwarded to the student, the Prior Learning Credit Advisor, and the Registrar regarding the amount of credit granted and the courses for which the credit will be counted in the student's program.

Forty dollars (\$40) per credit hour will be charged for the review of the materials. This fee must be paid and registration procedures completed prior to the beginning of the review. Payment will be made at the One Hop Shop in the Campus Center. NOTE: It is the responsibility of the student to follow up and ensure that the form gets to the Dean. Student Accounts will not forward the form if the student is paying through CashNet.

8. Forty dollars (\$40) per credit hour will be charged for prior learning credit granted. This fee must be paid prior to the granting of credit. Payment will be made at the One Hop Shop in the Campus Center.
9. Credit will be recorded as "CR" on the student's official transcript under the appropriate course number, but only following the student's satisfactory (2.00 GPA or higher) completion of one full-time semester or its equivalent in the student's program.

MILITARY TRAINING AND EXPERIENCE

The College may grant advanced standing for military training and experience as recommended by the American Council on Education. Where courses, service school experience, or subject matter exams are applicable to a curriculum in which a student is enrolled at this college, credit

will be determined using the publication "Guide to the Evaluation of Educational Experiences in the Armed Services." In order to have your military transcripts evaluated, please utilize the Joint Service Transcript (<https://jst.doded.mil/smart/signIn.do>) website and have your military transcript digitally sent to the SUNY Canton Admissions office.

MANNER OF RECORDING ADVANCED STANDING

Official transcripts of this college will include the appropriate number of credits granted for (1) courses transferred in from other higher education institutions, (2) proficiency examinations completed satisfactorily, (3) validated life experiences, and/or (4) military training and experience as "CR" credit only and be excluded in the calculation of a student's cumulative honor point index.

EARLY ADMISSION PROGRAM

Early admission will be granted to an applicant who has completed grade eleven of an accredited secondary school, meets the admission criteria for the program applied for, has maintained a strong academic average, and is recommended for college by the principal or guidance counselor. A contract detailing specific arrangements for completing the requirements for high school graduation must be made between the student, the high school principal, and the Director of Admissions. For further information, please contact the Office of Admissions. Arrangements for this contract are the responsibility of the applicant.

Students may be eligible for New York State TAP awards prior to completion of high school graduation requirements pending successful completion of "Ability to Benefit" test, also known as "Accuplacer". Additional information about paying for college is provided by the NYS Higher Education Services Corporation. If a

student will not have their high school diploma when they start at Canton and want to pursue a possible TAP award, they will need to take the Accuplacer. Scores would then be reviewed by the TAP certifying officer for aid consideration. Contact Sharon Tavernier at taverniers@canton.edu or by phone (315) 379-3954 to schedule the exam. Students seeking federal financial aid (in the form of grants or loans) will need to provide a letter signed by the high school principal stating that coursework will not be counted toward the high school diploma.

SUNY UPSTATE MEDICAL UNIVERSITY COLLEGE OF HEALTH PROFESSIONS EARLY ASSURANCE PROGRAM

The SUNY Upstate Medical University Early Assurance Program with SUNY Canton is a joint admissions program whereby students enroll at SUNY Canton for two years, complete an associate degree, and are then guaranteed admission into one of the SUNY Upstate Medical University College of Health Professions upper division programs. An exception to this is the Doctorate of Physical Therapy which requires a bachelor's degree prior to entry into the DPT Program at Upstate Medical University.

The degree programs offered through the College of Health Professions Early Admission Program are: Medical Imaging Radiography (X-rays), Medical Imaging Sciences/Ultrasound, Medical Biotechnology, Medical Technology, Radiation Therapy, Respiratory Therapy, and Nursing.

This program is a unique opportunity for students with a demonstrated commitment to a career in the health professions and a strong record of achievement in high school. Students accepted into this program are required to have completed at least three years of Regents or honors level courses in

math and science. Students applying to the Early Assurance Program should be in the upper quartile of their class. They must demonstrate a strong leadership background and show participation in extracurricular activities.

To apply for the SUNY Upstate Medical University College of Health Professions Early Assurance Program, students must complete the SUNY application for admission applying for Liberal Arts & Science: General Studies at SUNY Canton noting joint admission with SUNY Upstate Medical University at Syracuse. **THE STUDENT DOES NOT COMPLETE THE SUNY APPLICATION FOR UPSTATE MEDICAL UNIVERSITY.** The student must complete the SUNY Upstate College of Health Professions application (https://www.upstate.edu/prospective/basics/about_applying.php) for their program of interest. An admissions interview will be required, though not guaranteed. Please see the website for deadlines and admission requirements. Student Admissions at SUNY Upstate may be reached at (315) 464-4570 or admiss@upstate.edu.

For further details, contact the SUNY Canton Office of Admissions, 315-386-7123 or 800-388-7123.

EX-OFFENDERS/ DISCIPLINARY DISMISSAL FROM COLLEGE

Students are not required at the point of application to disclose prior felony conviction. The college is required to inquire if the student has a prior felony conviction if a student seeks access to campus housing, participation in clinical, field experiences or internships, or participation in a study abroad program. However, depending on the field of study, a felony conviction can prevent a student from earning a degree or a licensure. Potential students who have been dismissed for disciplinary

reasons from a college will have their application reviewed by the Admissions Review Board. Copies of this policy are available from the Office of Admissions. Individuals who have been dismissed for disciplinary reasons from a college and who wish to apply are required to identify themselves as such and should request a copy of the policy. Individuals who do not disclose this information prior to admission may have their admission rescinded at the discretion of the Administration.

ARTICULATION AGREEMENTS

SUNY Canton has established articulation agreements with the Board of Cooperative Educational Services (BOCES) Centers, high schools, community colleges, public and private institutions of higher education, doctoral granting institutions, and international colleges. For a complete list of all transfer agreements to SUNY Canton and from SUNY Canton please visit <https://www.canton.edu/agreements/>

ARTICULATION AGREEMENTS TO SUNY CANTON

Articulation agreements to SUNY Canton include BOCES and/or high school articulations where students earn college credit upon enrollment in a SUNY Canton degree program and articulations whereby students, upon completion of an associate degree at the community college can transfer into a SUNY Canton baccalaureate program.

ARTICULATION AGREEMENTS FROM SUNY CANTON

Articulation agreements from SUNY Canton include articulations with institutions of higher education whereby a SUNY Canton student can enroll in a participating master's or doctoral degree parallel program as a 3+3, 4+1, or 4+3.

CONCURRENT ADMISSIONS (CON AP)

The Concurrent Admissions Program (ConAP) is a partnership between the Army Recruiting Command and over 1,900 participating colleges to mutually advance the goals of lifelong learning and post-secondary education for Future Soldiers. Concurrent with their enlistment in the Army, new soldiers are encouraged to apply for admission to SUNY Canton. Upon meeting satisfactory criteria for full or provisional admission, the soldier will be allowed to defer admission until completion of military service.

After completing a two-, three-, or four-year enlistment, the new veteran will be encouraged to enroll at SUNY Canton. This program also applies to soldiers enlisting in the Army Reserve.

Those interested in the CON AP program are encouraged to contact the SUNY Canton Coordinator of Veterans and Military Services.

AIR FORCE RESERVE OFFICER TRAINING CORPS (AFROTC)

AIR, SPACE, & CYBERSPACE STUDIES

Air Force Reserve Officer Training Corps (AFROTC) combines college study with military leadership, discipline, and training to produce officers and leaders for the United States Air Force and United States Space Force. Upon completion of the program and graduation with at least a bachelor's degree, students are commissioned as second lieutenants in the active duty Air Force or Space Force. A commission is an appointment as a military officer by the President of the United States.

CURRICULUM

AFROTC is normally a four-year program divided into two parts, the General Military Course (GMC) for freshmen and sophomores, and the Professional Officer

Course (POC) for juniors and seniors. All cadets also complete Leadership Laboratory (LLAB) each semester. Students are eligible to enroll as active cadets as late as the fall of their sophomore year and would enroll in both the freshman and sophomore classes. All students are eligible to take the Aerospace Studies courses but LLAB and physical training (PT) are restricted to only those students pursuing a commission.

GENERAL MILITARY COURSE (GMC)

The GMC involves a one credit hour course and a two-hour Leadership Laboratory each semester. The freshman curriculum introduces students to the United States Air and Space Forces and provides an overview of the basic characteristics, missions, and organization of the Air and Space Forces. The sophomore curriculum picks up where the freshman curriculum left off and provides a fundamental understanding of both leadership and team building.

FIELD TRAINING

After successful completion of the GMC, cadets are scheduled to attend Field Training during the summer between the sophomore and junior year. Field Training is an intense, three-week, hands-on leadership challenge. Cadets are evaluated on their leadership ability, mastery of military customs and courtesies, and drill and ceremonies.

PROFESSIONAL OFFICER COURSE (POC)

After successfully completing Field Training, cadets are sworn in to the POC and are enlisted in the inactive reserves while they complete their final two years of college. POC cadets are placed in leadership positions and are charged with running the cadet wing that is modeled after the organizational structure of the active-duty Air Force. The junior curriculum focuses on an in-depth study of leadership and management concepts. Special emphasis is placed on enhancing communication skills, and why they are important as a leader. The

senior curriculum is designed to give the foundation for cadets to understand their role as military officers and how they are directly tied to our National Security Strategy. It is an overview of the complex social and political issues facing the military profession.

LEADERSHIP LABORATORY (LLAB)

LLAB is a hands-on leadership training program. During LLAB, cadets are instructed in skills they will need for a thriving military career. POC cadets are responsible for planning and executing LLAB, as well as other extracurricular activities like formal dinners and awards ceremonies. Cadets are challenged in the classroom and their jobs in the cadet wing require them to put the theories into practice. Additionally, cadets must participate in 2 hours of Physical Training (PT) per week during each semester.

SCHOLARSHIPS

Merit-based tuition scholarships are available to AFROTC cadets; however they are not required to join the program. If a cadet has not received a scholarship for their freshman or sophomore years, after completing Field Training they are awarded a leadership award that pays up to \$18,000 per year for tuition and fees. Below is a list of current scholarships.

TYPE 1 — Pays full tuition and authorized fees at any public or private institution.

TYPE 2 — Pays up to \$18,000 per year (or \$9,000 per semester) towards tuition and authorized fees at any public or private institution.

TYPE 7 — Pays full in-state tuition rate and authorized fees at in-state public institutions (this can cover all of SUNY Canton's tuition and fees)

All scholarships include the following:

Monthly stipend during the academic year (up to \$500 per month)

Book allowance (\$450 per semester)

Any AFROTC scholarship can also be converted to a housing scholarship, which pays up to \$10,000 per year for on-campus housing.

For more details, contact the Air, Space, & Cyberspace Studies Department at det536af@clarkson.edu or 315-268-7989.

ARMY RESERVE OFFICER TRAINING CORPS (AROTC)

MILITARY SCIENCE

Army ROTC is a college program that produces Officers for the US Army. This program is available to SUNY Canton students by cross enrolling in the classes offered at Clarkson University. Students enroll in a series of classes and labs that teach problem solving, leadership theory, and decision making in a military context. There is a physical fitness component to the program and students are expected to meet fitness standards to complete the program. The goal of the department is to develop leadership and managerial ability, while preparing students to become Officers in the U.S. Army. An active extracurricular program provides many opportunities to participate in adventure training, intramural sports, and Army internships. Qualified students can compete for an opportunity to attend the Army Airborne School or Air Assault School. Army ROTC allows students flexibility to include ROTC in their various courses of study.

BASIC COURSE (Freshman and Sophomore Years)

The Basic Course teaches rudimentary soldier skills and knowledge and provides students with sufficient military background to make informed decisions about continuing on the path to becoming an Army Officer. It also gives the Army ROTC instructors the ability to access the future potential of enrolled students. Most enrolled students

in the Basic Course incur no military obligation and can withdraw at any time. Students who do decide to take the next step may compete for scholarships or pursue a non scholarship contract. All contracted Cadets receive a monthly stipend for participating in the class and incur a service obligation when they graduate.

PRIOR SERVICE/VETERANS

The Basic Course is normally a prerequisite for the Advanced Course; however, prior service personnel or members of the Reserve Forces who have completed basic training may enroll in the Advanced Course as juniors as long as they have achieved junior status.

BASIC-CAMP

Other interested students may qualify for the Advanced Course by attending a four-week Basic camp. Students applying through this route normally attend Basic Camp between the sophomore and junior years. This program is available to students who have at least two academic years remaining in their degree program, but did not participate in Army ROTC during some or all of their first two years of college.

ADVANCED COURSE

(Junior and Senior Years)

The Advanced Course places increased emphasis on tactical, technical, and leadership skills to prepare students for the Advanced Camp, normally attended the summer between the junior and senior years. The final year is spent on topics in military officership, and gives the students the opportunity to hold Battalion level staff positions.

SCHOLARSHIPS

The Army ROTC program has a limited number of scholarships available to qualified students. These are merit based scholarships and normally offered to students who are enrolled in the program. They

are awarded based on merit and academic potential, not on need. Students can compete for three-year scholarships during their freshman year and two-year scholarships during their sophomore year.

General information about ROTC can be found at www.armyrotc.com and information about the program at SUNY Canton can be found at www.clarkson.edu/armyrotc

To enroll or get more information contact the enrollment officer at 315 268-7695 or armyrotc@canton.edu.

Tuition and Fees

The following are estimated costs of attending SUNY Canton for 2025-26.

All costs are subject to change without notice.

	Fall 2025 SEMESTER	Spring 2026 SEMESTER	TOTAL
TUITION			
NYS Resident	\$3,535.00	\$3,535.00	\$7,070.00
Out-of-State Resident (Bachelor)	\$8,745.00	\$8,745.00	\$17,490.00
Out-of-State Resident (Associate)	\$5,950.00	\$5,950.00	\$11,900.00
Out-of-State Residents in Online Programs			
All Degrees	\$4,240.00	\$4,240.00	\$8,480.00
COMPREHENSIVE STUDENT FEE*			
First Time Students.....	\$929.50	\$809.50	\$1,739.00
Continuing Students.....	\$836.00	\$836.00	\$1,672.00
ADDITIONAL FEES			
Transcript Fee (billed each semester)	\$5.00	\$5.00	\$10.00
Graduation Fee (<i>graduating students only</i>)	—	\$50.00	\$50.00
Parking & Vehicle Registration Fee	\$188.60	—	\$188.60
<i>(includes NYS sales tax, full year charged in Fall semester)</i>			
International Health Insurance	\$ 906.45	\$1,257.92	\$2,164.37
<i>(foreign students only)</i>			
MEALS**			
Smith, Mohawk, Heritage, Rushton.....	\$3,375.00	\$3,375.00	\$6,620.00
<i>(10 meals/wk & \$500 Campus Cash, 210 Block & \$325 Campus Cash, 19 meals and \$200 Campus Cash)</i>			
Kennedy Hall.....	\$2,730.00	\$2,730.00	\$5,460.00
<i>(7 meals per week & \$500 Campus Cash Or may choose any of the above options,)</i>			
Commuter Meal Plan (optional)	\$925.00	\$925.00	\$1,850.00
<i>(60 meals/semester and \$250 Campus Cash)</i>			
Commuter Meal Plan II (optional)	\$250.00	\$250.00	\$500.00
<i>(12 meals/semester and \$75 Campus Cash)</i>			
HOUSING			
Smith, Mohawk, Heritage, and Rushton Residence Halls			
Double Room (standard)	\$4,675.00	\$4,675.00	\$9,350.00
Esports Double Room	\$5,530.00	\$5,530.00	\$11,060.00
Single Room	\$5,530.00	\$5,530.00	\$11,060.00
Kennedy Hall	\$6,175.00	\$6,175.00	\$12,350.00
Laundry Fee	\$55.00	\$55.00	\$110.00

* See description below. ** Residential students are required to purchase a meal plan.

**A "double room credit" billing model is used for students living in our four traditional residence halls. All students in Rushton, Mohawk, Heritage, and Smith Halls initially pay a room rate of \$5,190. Students who have a roommate will receive a pro-rated "double room credit" of \$255 at the end of the 5th, 10th and 15th weeks of each semester for as long as they have a roommate. If their roommate moves out, they will no longer receive these credits as they are now in a single room. Due to the higher cost associated with the Esports Wing, students are not eligible for a "double room credit."

FEES

COMPREHENSIVE STUDENT FEE

The comprehensive Student Fee is charged to all degree students and consists of the following fees:

College Fee - (*mandatory*) Fee required by all State-operated campuses.

Athletic Fee - (*mandatory*) Supports all intercollegiate athletic programs.

Health Fee - (*mandatory*) Supports the campus health Center. Students can use the health center for minor illness/injuries with no additional charge.

Educational Technology Fee - (*mandatory*) Supports the campus technology infrastructure and continued improvement of computer systems, classroom technology, wireless connections and technical help.

Student Activity Fee - (*mandatory*) supports a wide range of activities that take place on campus for educational and entertainment purposes.

Transcript Fee - (*mandatory*) Covers cost of all transcript requests for the student now and in the future.

Alumni Fee - (*optional*) Supports the College Alumni Association. Alumni services include: scholarships, gatherings, alumni weekend, and the alumni newsletter. (Instructions for waiver of fee on college billing instructions.)

Recreational Facilities Fee - (*optional*) Provides unlimited use of the campus recreational facilities. (Instructions for waiver of fee on college billing instructions.)

LATE REGISTRATION FEE

Should a student fail to register by the appropriate deadline, a \$50 late registration fee will be assessed.

LATE PAYMENT FEE

Should a student fail to process a bill by the appropriate deadline, a \$40 late

Tuition and Fees

payment fee will be assessed. This includes those checks used as payment of fees on or before a registration but returned by the bank as unpaid after registration day. A \$20 charge will be assessed for each check used for payment of fees which has been returned from a bank as unpaid.

BILL PAYMENT

Your student bill is required to be paid by the bill due date indicated on the semester bill. Bills received after these dates will be subject to a \$40 late payment fee and cancellation of class schedule and room assignment. If you wish to request a special deferment for payment, you should make arrangements with the Student Service Center BEFORE the bill due date. All deferments must be paid in full by the end of the semester for which it was made. Students not meeting the terms of their deferment may be subject to penalty during the semester. Penalties include, holds on accounts for transcripts, holds on meal plans and Roo Express credit, and possible suspension.

FINANCIAL AID REFUNDS

Refunds for those students who have a credit on their account from financial aid will begin with the fifth week after school begins. Refunds will be delivered with BankMobile Disbursements, a technology solution, powered by BMTX, Inc. Visit this link for more information: <https://disbursements.bmtx.com/refundchoices/>. Students may check their account statuses on their UCanWeb account.

DROP/ADD FEE

A fee of \$20 will be assessed for each Drop/Add Form processed beginning the second week of classes. Exceptions to this fee are noted in the Student Handbook.

IDENTIFICATION CARD REPLACEMENT CHARGE

An original identification card is provided at no charge. A \$20 replacement fee will be charged for all lost or damaged id cards.

TUITION/FEE REDUCTIONS DUE TO WITHDRAWAL TUITION

Semester charges reduced on a percentage basis as follows:

<i>Cancellation During</i>	<i>Reduction</i>
First week	100%
Second week	70%
Third week	50%
Fourth week	30%
Fifth week	0%

Full Semester Courses: The first that day that classes are offered, as scheduled by the campus, shall be considered the first day of the semester. The first week of classes for purposes of this section, shall be deemed to have ended when seven calendar days, including the first day of scheduled classes, have elapsed. This applies to all full-time students even if they have partial semester courses.

Partial Semester Courses, including Online (Part time Students only): The charge reduction period shall commence with that course's start date. Charge reductions will be pro-rated, based on the tables below: (This applies to part-time students only)

<i>7-week classes</i>	<i>Reduction</i>
First week	100%
Second week	65%
Third week	0%
<i>3-week classes</i>	
First & second day	100%
Rest of first week	65%
Second week	0%

FEES

The following fees are non-refundable:

- College Fee, Orientation Fee, Alumni Fee, Placement Fee, Vehicle Registration Fee.

MEAL PLAN REFUND

Meal Plans are refunded on a percentage basis as follows:

Cancellation During | Refund Percent

- First Week | 100%
- Second Week | 70%
- Third Week | 50%
- Fourth Week | 30%
- Fifth Week | 0%

Week one will begin the first full week of classes. After week 5, no refunds will be issued. Meal plan changes will only be accepted throughout the first full week of classes. Refunds will only be allowed for withdrawals from school. Refunds due to the removal of a student from the residence hall for academic or disciplinary reasons are at the discretion of College Association management.

Meal plan refunds, are based upon a prorated schedule and a \$25 processing and administrative fee will be incurred.

Students moving from a Traditional Residence Hall to Kennedy Hall will have the option to remain on their chosen plan or to select the Kennedy Hall plan based upon a prorated schedule. Students moving from Kennedy Hall to a Traditional Hall must change to a Traditional Hall plan.

Unused Campus Cash will rollover from fall semester to spring semester with the purchase of a spring semester meal plan. Campus Cash does not rollover from spring to summer or fall. Campus Cash is part of the meal plan, has no cash value, and is non-refundable.

HOUSING: RESIDENCE HALL

Upon official withdrawal from the College, residence hall reductions are on a percentage basis as follows:

<i>Cancellation During</i>	<i>Reduction</i>
First week	100%
Second week	70%
Third week	50%
Fourth week	30%
Fifth week	0%

Residence hall opening day shall be considered the first day of the semester. Seven calendar days later will be deemed the end of the first week for refund purposes.

LAUNDRY FEE

Non-refundable.

TITLE IV REFUND POLICY

Under Federal Financial Aid rules, the college recalculates Federal* financial aid eligibility for students who withdraw, officially or unofficially are dismissed or take a leave of absence prior to completing 60% of a semester. Recalculation is based on the percent of earned aid using the following formula:

Percent earned = Number of days completed up to the withdrawal date**/ total days in the semester (including weekends and breaks under five days).

Federal financial aid is returned to the federal government based on the percent of unearned aid using the following formula:

Aid to be returned = (100% – percent earned) X the amount of aid disbursed toward institutional charges.

When aid is returned, the student may still owe a balance to the College. The student should contact the Student Service Center to make arrangements to pay the balance. Also note that students who cease attendance but do not officially withdraw will be considered an unofficial withdrawal and a recalculation of federal aid eligibility will be done assuming completion of only 50% of the semester unless a last date of attendance is known.

**Federal financial aid includes Federal Pell Grant, SEOG Grant, Direct Student Loan—subsidized and unsubsidized, and the Direct PLUS Loan. Students who cease attendance and do not officially withdraw will be considered an unofficial withdrawal and a recalculation of federal aid eligibility will be done using the 50% date or the actual last date of attendance whichever is later.*

***Withdrawal Date is defined as the date the student began the withdrawal process, or the midpoint of the semester or last date of attendance for a student who leaves without notifying the College, whichever is later.*

PAYMENT PLAN

To set up monthly payments, families can do so through CASHNet. This plan allows you to pay the balance of your semester bill with monthly installments over a 4- or 5-month period depending on when the plan is set up. There will be an initial enrollment fee. Instructions can be found on our billing on your UCan-Web eBill account, or by calling 877-821-0625.

ROO EXPRESS AGREEMENT

ROO Express: A flexible spending account that is an optional, taxable debit account at SUNY Canton that allows the account holder to add funding to access and spend said funds on and off-campus at selected locations using their Campus ID Card. The account is accessed through the campus ID card, the official identification card for SUNY Canton.

ROO Express may be used at the following locations: ROOs Court, Rendezvous, Cyber Café, Joey's, The Corner, Chaney Dining Center, the Campus Store, in campus vending services (excluding Micro-Market), and at select off-campus providers.

Once a ROO Express account is opened, funds may be added via credit card, cash, debit card, or check deposit through College Association's Student Support, located in Miller Campus Center, room 115 or by emailing akinsd@canton.edu. ROO Express that is funded through financial aid can only be applied to the student's ID once their student bill is processed by the One-Hop Shop Student Service Center. There is a \$1,500 balance limit for ROO Express accounts.

Any ROO Express account with a balance \$10.00 or more rolls forward semester-to-semester. Cash withdrawals cannot be made from the ROO Express account.

All transactions can be viewed online. Upon reviewing transactions, inform CA of

any discrepancies immediately. The discrepancy will be investigated, and the account holder will be notified of the determination within 20 business days. If CA is not informed of a discrepancy within 60 days after the transaction occurred, the participant shall assume liability for the charges.

ROO Express is not accepted for purchases of alcohol, tobacco products, lottery tickets, gift cards/certificates, items that could be construed as weapons, obscene materials, tattoos, or items sold by multilevel-marketing organizations.

Information regarding the account holder's transactions may be disclosed to third parties when necessary to complete transactions, when the condition or existence of an account must be verified, to comply with a government agency, court orders, or with the participant's written permission.

ROO Express accounts are linked through the Student or Faculty/Staff Banner ID. Every person employed or attending SUNY Canton may activate and use a ROO Express account. To activate an account, visit College Association Student Support in Miller Campus Center, room 115.

Students may also activate an account through their student checklist on Banner. ROO Express that is funded through financial aid can only be applied to the student's ID once their student bill is processed by the One-Hop Shop Student Service Center.

How to Add Funds

ROO Express account funds are added through cash, credit card, check, or financial aid. An account holder can add funds to an account via the following methods:

- **In person:** College Association Student Support in Miller Campus Center, room 115
- **By phone:** 315-386-7624
- **E-mail:** David Akins at akinsd@canton.edu
- **Online:** Via the GET Mobile app or at <https://get.cbord.com/sunycanton/full/prelogin.php>

Parents, friends, and family may add

funds as well via the link above. For access to Roo Express balances at all times, please go to your App Store and download the GET app.

Refund Process

Upon graduation, separation, or at the end of the fall or spring semester, the account holder may contact CA for a refund of any remaining ROO Express funds. Balances are refunded only upon a request from the account holder. To make refund request, contact College Association Student Support in Miller Campus Center 115 or email akinsd@canton.edu. An \$8.00 processing fee applies on refunds.

- The processing fee is waived in the following instances: When a student's bill has not been fully processed and/or the funds have not been accessed by the account holder.

Account Deactivation/Reactivation

Accounts are deactivated when an account reaches \$0.00. A deactivated account may be reactivated when the account holder adds funds.

Account Inactivity & Balances

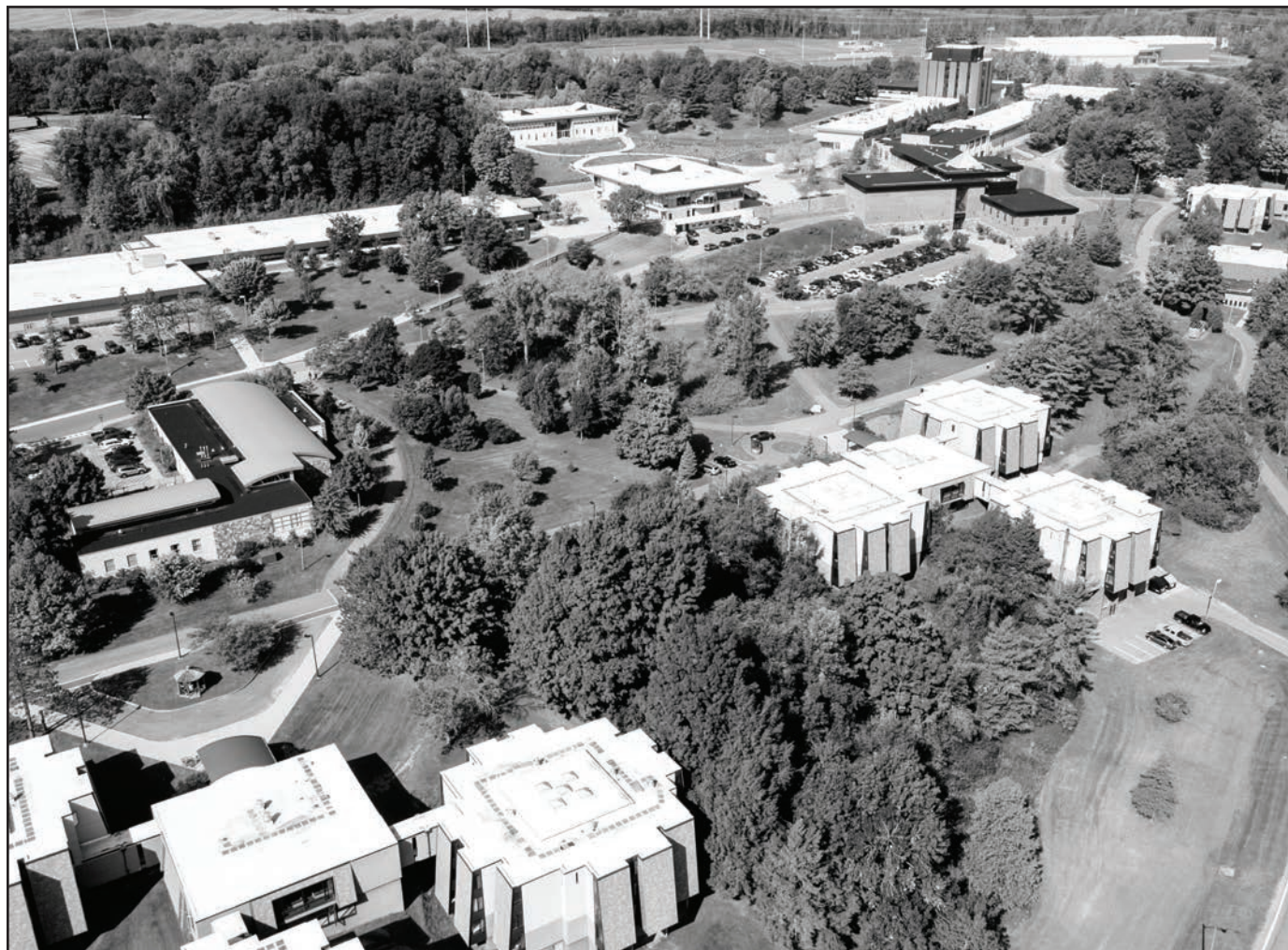
After one year of inactivity, any balances less than \$10.00 are considered non-refundable and will be closed.

Balances greater than \$10.00 will incur a \$10.00/month inactivity fee. An amount of \$120.00 will be charged exactly at the one year-mark of inactivity, and \$10.00 will be charged each subsequent month until there are no funds remaining and the account is closed.

Any balances of \$300.00 or more will have a letter sent to the account holder from the College Association stating that there are funds remaining in the account. It

is up to the account holder in all instances to request a refund. Any remaining unclaimed funds will be turned over to the state following five years of inactivity.

The amount of any monthly maintenance fee is not refundable in whole or in part, and will not be restored to the student even if they later request a refund of their unused ROO Express. Roo Express is a financial pro-gram managed by the College Association for SUNY Canton. All policies are approved by the College Association Board of Directors.



Financial Assistance

SUNY Canton offers a comprehensive program of financial assistance to help students and their families meet the costs of a quality college education. Approximately 96 percent of incoming freshman attending SUNY Canton receive some form of financial assistance.

The following information is provided as a general reference to financial aid at SUNY Canton and is based on statutes, regulations and policies current at the time this Academic Catalog was prepared for publication. These descriptions are, however, subject to change. Thus, it is recommended that candidates for admission and current students contact the Financial Aid Office, Miller Campus Center, SUNY Canton, 34 Cornell Dr., Canton, New York 13617, telephone (315) 386-7616 or toll free at (800) 388-7123 or email at finaid@canton.edu.

FINANCIAL AID OFFICE - ONE HOP SHOP

The Financial Aid Office in the One Hop Shop at SUNY Canton exists to provide personal assistance to students and parents on a one-to-one basis from the time of initial inquiry until the completion of a student's program of study. Every effort is made to insure that qualified and deserving students are not denied the benefits of a SUNY Canton education on the sole basis of financial need. Financial aid at SUNY Canton is awarded based on financial need and merit, without regard to sex, race, age, color, creed, national origin, disability or handicap.

FINANCIAL AID OFFICE MISSION

The mission of the Financial Aid Office is to:

- Provide personal assistance regarding the financial aid process to students and families on a one-to-one basis.
- Provide education to students and

families on all financial aid options.

- Develop administrative processes designed to provide the best customer service and efficiency for students and families.
- Strive to ensure, to the extent possible, that students are not denied the benefits of a SUNY Canton education on the sole basis of need.
- Maintain a caring, highly knowledgeable staff to assist in this mission.

STUDENT/PARENT RESPONSIBILITY

The federal financial aid system is based on the belief that it is first the family's responsibility to contribute to the costs of the student's college education, to the extent that the family is financially able. Determining what the family can contribute is accomplished by having the student complete the Free Application for Federal Student Aid (FAFSA) which assesses the family income and assets.

If the determination is made that the family resources are not sufficient to meet the total cost of education, SUNY Canton may help meet the student's need through some combination of its own aid funds and those funds available from other public or private sources. If it is determined that the family's resources are sufficient to meet the yearly college costs, or additional help is needed, the student, although ineligible for regular forms of aid, may qualify for some non-need-based assistance. Non-need-based aid and alternative methods of meeting college costs will be discussed later in this section.

INDEPENDENT/DEPENDENT STATUS DETERMINATION

The criteria that is used to determine whether a student is considered dependent

or independent differs for federal and state aid. If a student meets the federal independence criteria, then federal aid eligibility is based on the student's (and spouse's, if married) income from two years prior. If a student does not meet the federal independence criteria, then his/her federal aid eligibility is based on the student's and the parent's income from two years prior.

SUNY Canton adheres very closely to the federally-established independence criteria. We do recognize, however, that there are special cases in which students may not meet the federal independence criteria but may have extenuating circumstances. These students should contact the Financial Aid Office for further guidance.

Independence criteria for state aid is established in NYS law. The New York Higher Education Services Corporation (NYHESC) in Albany is the agency responsible for determining the student's dependency status for state aid.

Students over the age of 35 are considered independent for state aid. For students under the age of 35, the state criteria considers whether the student lived/lives with the parent(s), whether the student has been claimed as a tax exemption by the parent(s), and whether or not the student has/will receive financial support from the parent(s) in recent years.

Questions regarding dependency status for federal and/or state aid should be directed to the Student Service Center. Students should be ready to document the information they provide on the aid application concerning their dependency status.

TYPES AND SOURCES OF AID

There are three major types of financial aid: 1) Grants and scholarships, also known as gift aid because this type of aid, in almost all cases, does not have to be repaid; 2) loans, which must be repaid but typically not until the student has left school

or dropped below half-time status; and 3) part-time employment, through which the student earns a wage by working on-campus.

There are four major sources of aid: 1) the federal government provides the largest source of funding; 2) the State, most states, including New York, sponsor state grant & scholarship programs for their residents; and 3) the College itself may be a source of aid, or with scholarship or loan funds that the College has raised. 4) private sources- there are several scholarship and loan programs available to assist students. Refer to the financial aid page of www.canton.edu for more information.

APPLYING FOR FINANCIAL AID

Students applying for financial aid at SUNY Canton should be aware of the following application process:

- Each student must complete the following, as soon after October 1st of the year prior to anticipated enrollment: 1) the Free Application for Federal Student Aid (FAFSA), and 2) the New York State TAP Grant application. Both applications may be completed online at <https://studentaid.gov>. For an electronic signature you and your parents will need to create an FSA ID. You can do this at any time before filing the FAFSA.
- Out-of-state students should check with their state's higher education agency to determine if they need to complete a separate application to be considered for a grant from their home state.
- Aid eligibility is based on income from the tax year two years prior to the FAFSA year. Therefore, if applying for aid for the 2025-26 year, a family may be asked for signed copies of the 2023 income tax forms. Students and parents provide consent to retrieve and disclose Federal Tax Information from the IRS to the Department of Education when completing the FAFSA.

—Students should research the availability of private scholarships. Visiting a high school guidance office, local library, or the Internet can provide free access to information concerning private scholarships.

—SUNY Canton funds a number of scholarships for freshmen and returning students. All accepted students will be reviewed for a scholarship. Accepted student will receive an invitation email with instructions to complete the general scholarship application. Students who have completed the general scholarship application will be given priority consideration, however, completing the application does not guarantee the student will receive a scholarship. If awarded a scholarship. Students will also be made aware of their scholarship application deadline. A listing of current College Foundation Scholarships is available at the end of this section. Questions concerning Scholarships should be directed to the scholarship@canton.edu.

—Any outside financial aid awards that a student receives must be included in the award package. If aid adjustments are necessary loans will be reduced before grant aid or work in most cases.

DEADLINES

Application deadlines vary from program to program. Since funding from the federal government is limited for the campus-based aid programs (Federal Work-Study, and Federal SEOG), these funds are awarded on a first-come, first-served basis, until funds are exhausted. To be considered for these funds, students should submit a FAFSA at studentaid.gov by the priority deadline. It will take one to three weeks for the processing agency to process the student's application and forward it to the Student Service Center. *We strongly encourage all students to complete and submit their FAFSA before January 1st of each award year.*

BASIC ELIGIBILITY REQUIREMENTS

All students applying for federal financial aid must meet the following basic requirements:

1. You must be a U.S. citizen or eligible non-citizen (have an alien registration number).
2. You must have a high school diploma or its equivalent (ex., GED). Home-schooled students must have officially completed their program.
3. You must be enrolled as a regular student in an eligible degree program.
4. You must not be in default of any previous student loans or owe a repayment on federal grants.
5. You must maintain satisfactory academic progress in your degree program.

NOTIFICATION OF ELIGIBILITY

Applications are reviewed by a financial aid advisor. In some cases, the Financial Aid Office will request additional information from the student and family (for example, we may request copies of income tax transcripts or other income verification). The student should respond immediately to any requests for information that he/she receives. Once the Financial Aid Office has received all necessary forms and documents from the student, the student's file is considered complete and ready for notification of aid eligibility.

Students are notified of their financial aid package availability by SUNY Canton email and letter. Awards may be accepted or declined online on their student UCanWeb account.

The Financial Aid Office will begin award notifications as soon as it becomes possible. The process continues as applications are received.

SPECIAL CIRCUMSTANCES

If you feel that you have a special circumstance that needs to be taken into consideration for financial aid eligibility, we may be able to recalculate your eligibility within federal guidelines. To request a special circumstance review, you must first speak with a Financial Aid Counselor to discuss your special circumstance and determine what documentation will be required based on your individual situation. For more information, go to www.canton.edu, click on Financial Aid, then on Forms.

AVAILABLE FEDERAL PROGRAMS

Students are automatically applying for these aid programs when they complete the Free Application for Federal Student Aid (FAFSA).

FEDERAL PELL GRANTS

Eligibility for the Federal Pell Grant is determined by the Department of Education based on the information provided on the FAFSA. Students must submit a FAFSA each academic year. Award amounts are set annually by the federal government. The Pell Grant Program is an entitlement program, no repayment is required. The Pell Grant may be used for tuition, fees, books, and living expenses. All Pell recipients have a lifetime eligibility limit of 12 full-time semesters. As of 7/1/09 any student who whose parent/legal guardian died in Iraq or Afghanistan will be entitled to the full Pell award.

Currently, awards for eligible students can be as much as \$7,395.00. The amount of the award will be affected by costs of attendance and full- or part-time enrollment status. The Pell Grant does not duplicate the State awards.

Pell recipients must continue to make satisfactory academic progress in the program in which they are enrolled. Students who possess a bachelor's degree are ineligible for a Pell Grant.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (FSEOG)

Recipients of the Federal Pell grant may be eligible for this additional grant based on available funding. The applicant must be in high financial need and enrolled at least half-time. As a grant program, no repayment is required. Students who possess a bachelor's degree are ineligible for FSEOG.

Currently, typical annual FSEOG awards range from \$200 to \$1,500 depending on funding. Recipients must continue to make satisfactory academic progress in the program in which they are enrolled.

FEDERAL WORK-STUDY PROGRAM

Federal Work-Study is awarded to eligible students based on the information submitted on FAFSA. Students are given the opportunity to work at various sites on campus. The amount each work-study student may earn is predetermined by the Office of Financial Aid. The student works a specific number of hours each week during the semester to earn that amount. Students are included in the payroll system and receive a bi-weekly paycheck. Work-study money is allocated at the College by the federal government and jobs are contingent upon funding.

The starting salary is set at minimum wage. Currently, a typical annual award is worth \$2,000 which means that the student would work approximately five - six hours per week to earn his/her full award.

FWS recipients must continue to make satisfactory academic progress in the program in which they are enrolled.

FEDERAL DIRECT SUBSIDIZED STUDENT LOAN

This is a guaranteed student loan program that allows students to borrow funds from the federal government. As a guaranteed loan, students are determined eligible based on financial need based on the Free Application for Federal Student Aid (FAFSA).

The College will notify the student of his/her eligibility for a Federal Direct Subsidized Loan on the award notice. (Please note that not all students are eligible for a Subsidized Loan; the College's Student Service Center determines loan eligibility.)

To be eligible, a student must be a U.S. citizen or eligible non-citizen and be enrolled or admitted on at least a half-time basis. Once again, the student must demonstrate need for the loan as evidenced on a processed FAFSA. Amount of annual award is based on class year and degree program - Freshman \$3,500, sophomore \$4,500, Junior/Senior \$5,500. The interest rate is fixed - go to www.studentaid.gov for current rates. Principal and interest are deferred during the time that the student is enrolled on at least a half-time basis. Borrowers have up to ten years to repay and repayment begins six months after the student ceases to be enrolled on at least a half-time basis. Payment of the principal may be deferred for up to three years for certain categories of Public Health Service officers, the temporarily disabled, those in internships required before entering a profession, and Peace Corps or Vista volunteers.

All Federal Stafford Loan recipients are required to attend an entrance interview and complete an electronic promissory note before receiving the first Sub-sidized Loan disbursement. Both can be done online at studentaid.gov. Before leaving the College, all Federal Direct Loan recipients are required to attend an exit interview. The purpose of these interviews is to inform the student of his/her rights and responsibilities concerning the loan, to be sure that the student is aware of what borrowing entails, to be sure that the student understands the consequences of not repaying the loan, and to be sure that the student is clear on the repayment terms of the loan and who the loan will be repaid to, as well as the amount of loan borrowed. Questions concerning loan entrance, exit interviews, or promissory notes should be directed to the Financial Aid Office.

FEDERAL NON-NEED BASED LOAN PROGRAMS

FEDERAL DIRECT UNSUBSIDIZED STUDENT LOAN

Most terms and conditions of the unsubsidized loan are the same as for the subsidized loan except that interest accrues while the student is in school. Annual amount based on dependency status, class year and cost of attendance. Dependent students are eligible for up to - Freshman \$5,500, Sophomore \$6,500, Junior/Senior \$7,500 minus the amount of Direct Subsidized Loan. Independent students are eligible for up to - Freshman \$9,500, Sophomore \$10,500, Junior/Senior \$12,500 minus the amount of Federal Direct Subsidized Loan. The total of the student's unsubsidized loan, and the other aid/resources that the student will be receiving, can never exceed the total cost of attendance. Accrued interest may be paid or added to the loan (capitalized) as agreed by the borrower and the federal government. The first step in being considered for an unsubsidized loan is to complete the Free Application for Federal Student Aid (FAFSA).

FEDERAL DIRECT PARENT LOAN FOR UNDERGRADUATE STUDENTS (DPLUS)

This is a program that allows parents to borrow funds from the federal government. Under DPLUS, the parent is the borrower and if eligible, (these loans are subject to a credit check) may borrow up to the difference between the yearly cost of attendance and the student's other yearly financial aid.

Interest on the principal is fixed at 8.05% beginning 7/1/23. Repayment of a DPLUS Loan begins 60 days following receipt of the loan's second disbursement. Parents may request a deferment of payments from the loan servicer until the student is out of school.

It is also important to note that the parent and student must be U.S. citizens or eligible non-citizens, and neither can be

in default on a prior student loan or owe a refund on a federal grant in order to be considered for a DPLUS loan. In addition, the student must be: 1) accepted or enrolled in an eligible program leading to a degree or certificate; 2) be enrolled on at least a half-time basis; and 3) maintain satisfactory academic progress if currently enrolled. The promissory note for the DPLUS can also be done online through studentaid.gov.

FEDERAL AID TO NATIVE AMERICANS (BIA GRANT)

To be eligible for consideration a student must: 1) possess one-fourth or more degree Indian blood and be certified by their Tribe, 2) be a member of a Tribe, 3) be enrolled (or accepted for enrollment) on a full-time basis in a program which will lead to a four-year degree, and 4) have a definite financial need after all other sources of financial assistance have been applied.

Application forms may be obtained from a liaison office of the U.S. Bureau of Indian Affairs. The application deadline is July 15 for the Fall Semester/academic year and October 15 for students beginning their studies in the Spring Semester. Please note that students should first complete the Free Application for Federal Student Aid (FAFSA). Students must reapply for federal Native American aid each year and must meet certain academic standards to continue to receive the grant.

AVAILABLE STATE PROGRAMS

EXCELSIOR SCHOLARSHIP

This program is available to NYS residents pursuing a two or four-year degree program in SUNY or CUNY. Successful applicants must earn at least 30 credits per year toward their degree program and be on track for graduation. Awardees are required to reside in NYS once they have ceased enrollment for the amount of time that they received the award. They

are not required to be employed but if so, must be employed within NYS. This scholarship is a "last dollar in" award so any grant or scholarship that is not a specifically a non-tuition award must count first toward tuition. Information is available at www.canton.edu/excelsior and application is available at www.hesc.ny.gov/excelsior. Students eligible for Excelsior will also have a corresponding Excelsior Tuition Credit.

TUITION ASSISTANCE PROGRAM GRANT (TAP GRANT)

The TAP Program is an entitlement program, and no repayment is required as it is a grant. To be eligible for consideration, the student must be: 1) a New York State resident (as defined by the New York Higher Education Services Corporation's residency policy) and a U.S. citizen or eligible non-citizen, 2) be enrolled on a full-time basis (at least 12 credit hours per semester required for student's curriculum), 3) certain students may be eligible if enrolled part-time. Eligibility for TAP is based on the family's New York State taxable income from two years prior and considers how many family members, other than the applicant, will be enrolled in college on a full-time basis.

Students must file a FAFSA application and a TAP Application each year to be considered for assistance. TAP awards at SUNY Canton ranged from \$1000 to \$5,665 per year, for students who qualified. Students can receive a TAP award for no more than six full-time semesters of undergraduate study at the associate degree level or eight semesters at the bachelor's degree level. EOP students may have additional eligibility. Recipients must be in good academic standing in the program in which they are enrolled.

SUNY TUITION CREDIT

If a NYS Resident student's semester tuition is at least \$3,535 and they have a TAP award they will also receive a SUNY Tuition Credit.

OTHER AWARDS/SCHOLARSHIPS SPONSORED BY NEW YORK HIGHER EDUCATION SERVICES

The New York Higher Education Services Corporation sponsors the following awards for special populations:

- Veteran Tuition Awards (VTA)
- Child of Veteran Awards (CV)
- Military Enhanced Recognition Incentive and Tribute -(MERIT) Scholarship
- NYS Memorial Scholarship
- NYS Achievement and Investment in Merit Scholarship (NY-AIMS)
- NYS Science, Technology, Engineering and Mathematics (STEM) Incentive Program
- NYS World Trade Center Memorial Scholarship

In addition to completing the FAFSA, students who wish to be considered for any of the above awards must also complete the New York State TAP Grant Application and NYS scholarship application. Typically, if a TAP award is received in addition to any of the above awards, the combined award can be no greater than the cost of tuition. Recipients must be in good academic standing in the program in which they are enrolled.

For more specific information concerning the above state awards, contact the Financial Aid Office or the New York Higher Education Services Corporation, (HESC) at <http://hesc.ny.gov/>.

NEW YORK STATE AID TO NATIVE AMERICANS

Application forms may be obtained from the Office of Indigenous Education Unit, New York State Education Department, Albany, NY 12230. The completed application along with required documentation should be forwarded to the Office of Indigenous Education Unit. This is an entitlement program, with neither a qualifying examination nor a limited number of awards, and repayment is not required. There are application deadline dates.

The award is a maximum of \$1,000 per semester for a maximum of four years of full-time undergraduate study (five years where a fifth year is required for completion of degree requirements). Awards are not provided for study in remedial programs.

Students are responsible for notifying the Native American Education Unit in writing of any change in student status. Students must also submit semester grades, at the end of each semester, showing satisfactory progress toward completion of degree requirements.

EDUCATIONAL OPPORTUNITY PROGRAM (EOP)

This program operates in the State University of New York and is designed to provide access to post-secondary education to educationally- and economically-disadvantaged students. It is a comprehensive program in which financial assistance is one possible component along with special counseling, tutoring, and remedial course work.

Application is automatic via the SUNY Application for Admission. An applicant must be:

- A New York State resident or eligible under the NYS Dream Act;
- Academically disadvantaged according to definitions promulgated by SUNY;
- Economically disadvantaged according to guidelines approved by the Board of Regents and the Director of the Budget. Students who apply for the EOP Program will be required to provide documentation of total family income to ensure that they meet prescribed income guidelines prior to admission in the EOP Program.

The amount of financial assistance and other support provided to EOP students is dependent on need as determined by SUNY Canton, using NYS regulations and budget approval.

EMPIRE STATE DIVERSITY HONORS SCHOLARSHIP PROGRAM

The SUNY Canton/Empire State Diver-

sity Honors Scholarship program provides assistance to students who have demonstrated high academic achievement and have overcome a disadvantage or other impediment to succeed in higher education. Individuals selected to receive these scholarships must:

- Be U.S. citizens or have permanent resident status,
- Be residents of New York State and
- Demonstrate how they have overcome a disadvantage or other impediment to success in higher education.
- Demonstrate a commitment to contributing to the diversity of the student body by facilitating and enhancing diversity, equity, and inclusion efforts in their academic programs and campus activities.

Even though financial need is not a requirement for program eligibility, applicants may utilize economic disadvantage as a basis for eligibility.

Preference will be given to students who are:

- All enrolled students at SUNY Canton who meet the eligibility requirements stated above and have completed the Empire State Diversity Honors Scholarship Program (ESDHSP) application,
- From a low-income background (e.g., Pell-eligible as undergraduates), were first-generation college students (students whose parents have not earned a bachelor's degree), have overcome adversity, are AmeriCorps alumni, or are veterans.
- If enrolled at the College, each recipient must have at least a 2.75 cumulative grade point average;
- While it is the intent that the recipient will continue to receive such support while enrolled, support will be withdrawn if the student's cumulative grade point average is lower than 2.50.

The Empire State Diversity Honors Scholarship Program is open to any and all

prospective candidates regardless of race, color, national origin, or sex, and is consistent with all current governing federal and state nondiscrimination law. All application submissions will be assessed and evaluated in accordance with the required eligibility criteria.

Further information concerning this program is available from the Financial Aid Office or by visiting this link: <https://www.canton.edu/admissions/scholarships.html>

All campus distributions are pending annual state budget approval. Funding may not be guaranteed every year.

SCHOLARSHIPS AT SUNY CANTON

Most of the financial assistance available at SUNY Canton is awarded based on an individual student's financial need as determined by the Free Application for Federal Student Aid (FAFSA). However, there is an increasing number of awards through state and the Canton College Foundation funding which recognize special characteristics and accomplishments of our students and incoming freshmen.

Scholarship Awarding Policy for State Funds

Committee Composition: The Scholarship Committee must be made up of the following:

2 Admissions representatives (1 Chair and 1 committee member), 2 Financial Aid representatives (1 records and financial aid reporter and 1 committee member), 2 Foundation representatives (1 Foundation liaison and 1 committee member)

*Committee composition restricts the membership of any individual whose campus role may show bias toward one specific group of students, (Ex. International Student Coordinator, Athletics Personnel, Admissions Athletics Liaison, Faculty Members).

Awarding Policy:

Only accepted students will be reviewed for a scholarship.

All accepted students will receive an invitation email at both their canton.edu and personal email accounts with Instructions on how to log into Awards Management and complete the general scholarship application.

Students who have completed the general scholarship application will be given priority consideration; however, completing the general scholarship application does not guarantee the student will be awarded.

Scholarships will be awarded based on need with the consideration of criteria specific to each scholarship.

Review will begin mid-November with an aim to award the majority of scholarships by the end of March.

Applicants who have completed the general scholarship application before the priority deadline of February 1st will be reviewed with precedence.

Award recipients will be notified with an award email at their canton.edu email account noting the name and the amount of their award. The award email will outline the stipulations to maintain the award and the number of years/semesters that the amount will be provided. The email will also indicate how the student must log into Award Management to accept their award and they must accept their scholarship within 30 days of the email date. Once the student accepts their scholarship, the award will be included in their financial package. If the student fails to accept their award within the 30 days, the award will be canceled and awarded to another deserving student.

Available scholarships and their award criteria are listed herein.

STATE AWARDS:

Presidential Scholarship

- Awarded to a first-time student
- \$5,000 annual value

- Recommended minimum HS GPA of 94
- Campus residency required
- Renewable up to four years with GPA requirement of 2.5

Excellence Scholarship

- Awarded to a first-time student
- \$3,600 annual value
- Recommended minimum HS GPA of 92
- Campus residency required
- Renewable up to four years with GPA requirement of 2.5

Leadership Scholarship

- Awarded to a first-time student
- \$2,500-\$3,500 annual value
- Recommended minimum HS GPA of 90
- Renewable up to four years with GPA requirement of 2.5

Criminal Investigation and Criminal Justice Scholarship

- Awarded to a first-time student
- \$3,000 annual value
- Must submit FAFSA
- Enroll full-time in Criminal Investigation or Criminal Justice
- Recommended minimum HS GPA of 2.5
- Renewable up to four years with a GPA requirement of 2.5
- Preference to students showing leadership potential

North Country Educational Scholarship

- Awarded to a first-time student
- \$1,500-\$2,500 annual value
- Recommended minimum HS GPA of 87
- Renewable up to four years with GPA requirement of 2.5

Grasse River Educational Scholarship

- Awarded to a first-time student
- \$1,000-\$2,000 annual value
- Recommended minimum HS GPA of 85
- Renewable up to four years with GPA requirement of 2.5
- Need Eligible - Must submit FAFSA

1906 Scholarship

- Awarded to a first-time student
- \$800-\$1,500 annual value
- Recommended minimum HS GPA of 85
- Renewable up to four years with GPA requirement of 2.5
- Need Eligible - Must submit FAFSA

Alumni Scholarship

- Awarded to a first-time student
- \$500-\$1,000 annual value
- Recommended minimum HS GPA of 85
- Renewable up to four years with GPA requirement of 2.5

Financial Assistance

Transfer Merit Scholarship

- \$1,000 annual value
- Recommended minimum transfer GPA of 2.5
- Renewable up to two years with GPA requirement of 2.5
- Need Eligible - Must submit FAFSA

Part-Time Scholarship

- \$75-\$200 per credit hour
- Recommended minimum GPA of 2.5
- Renewable up to two years with GPA requirement of 2.5

ADMISSIONS (OTHER STATE)

AWARDS:

Completion Scholarship

- Designed for current students with a financial hardship nearing completion of their degree, who may otherwise not be able to complete their degree without additional financial assistance.
- Continuing student
- Must have a 2.5+ GPA

Discover SUNY Canton Scholarship

- Allows out-of-state students to study online and benefit from the university's standing as a leader in distance learning.
- Enrolled full-time or part-time (not applicable to non-degree)
- Must reside outside the state of New York and be enrolled exclusively in online coursework
- Must have a 2.5+ GPA

eScholarship

- Awarded to students majoring in Game Design and Development, Technological Communications, Graphic and Multimedia Design, Information Technology, Cybersecurity, or Computer Information Systems.
- Available to freshman and transfer students
- Must show previous academic achievement and a history of previous study or involvement in game design and development or related field
- Renewable up to four years with GPA requirement of 2.5

Path for Completion Scholarship

- Designed for non-traditional students who have been out of college for a period of time and have an interest in completing a degree but are experiencing financial hardship.
- Available to transfer, transfer re-admits, and returning students
- Must have a 2.5+ GPA

Promise Scholarship

- Intended for students demonstrating promise for success in college. Students are awarded based on their overall academic performance in high school, demonstration of community involvement, financial need, and proven ability to overcome adversity.
- Available to freshman and transfer students
- Freshmen 75+ GPA, Transfers 2.25+ GPA
- Renewable up to four years with a GPA requirement of 2.5

Canton Scholars Program Scholarship

- Awarded to students majoring in Mechanical Engineering Technology, Electrical Engineering Technology, Civil and Environmental Engineering Technology, Computer Information Systems, Information Technology, Construction Technology Management, Veterinary Science Technology, Automotive Technology, Sports Management, Accounting, Health Care Management, and Graphic and Multimedia Design.
- Available to freshmen
- Amounts vary by GPA and geographic region
- GPA varies by major
- Renewable up to two years for a 2-year program and four years for a 4-year program with a GPA requirement of 2.5

CANTON COLLEGE

FOUNDATION SCHOLARSHIPS:

AAUW Memorial Scholarship

Alumni Association Scholarship

- Returning student
- Minimum 2.5 GPA
- Service to college community
- Financial need

Anderson-André Endowed Scholarship

- Entering freshman or continuing student
- Liberal Arts and Sciences: Chemistry option or Veterinary Science Technology curriculum
- St. Lawrence, Jefferson, or Lewis County resident
- Preference to graduates of Beaver River or Canton Central School

Timothy M. and Mary Lou Ashley

Family Endowed Scholarship

- Students in one of the following areas: Criminal Justice, Business Administration, or Liberal Arts
- To provide assistance to worthy individuals who appreciate the value of a quality education
- Student from St. Lawrence County

Alice Westaway Bagley Endowed Scholarship

- Nursing and allied health
- St. Lawrence County resident

Rachael M. and Leon E. Bagley Endowed Scholarship

- Freshman student, may be retained
- Preference to, but not restricted to, students from Madrid-Waddington or Edwards-Knox Central Schools

Baldwinsville High School Class of 1957 Scholarship

- Entering freshman from C.W. Baker High School, Baldwinsville, New York
- Air Conditioning Engineering Technology curriculum
- Other curriculums, if only one eligible Air Conditioning Engineering Technology student enrolls
- Students may retain scholarship

Patricia M. Barr '44 and Bernard P.

Raymo '32 Endowed Scholarship

- Continuing student
- Business curriculum
- Graduate from Canton Central, Clifton-Fine Central, or Massena Central High Schools

James D. Bartholomew Endowed Scholarship

- Entering freshman student
- Preference given to a graduate of Massena Central School or Madrid-Waddington Central School
- Construction Technology: Management or a related engineering curriculum

Bill Rapp Chevrolet of Ogdensburg Annual Scholarship

- Awarded to a student in the second year of the Automotive Technology Program
- Preference given to a student who graduated from a St. Lawrence County high school

Maryalice Grotkowski Blake '68

Endowed Scholarship for Nursing

- Enrolled or planning to enroll in two-year nursing curriculum
- Preference to Ogdensburg Free Academy graduate
- Financial need

Dr. Adelord S. and Sylvia H. Blanchard Endowed Scholarship

- Returning student
- Business curriculum
- Preference to candidates intending to pursue a baccalaureate degree in business

Ronald J. Blanchard '68 Student Leadership Endowed Scholarship

- First Generation college student
- Demonstrates leadership as officer/board member of campus club or advisory board member
- Must have 2.5 GPA and student may retain scholarship

Leland Blevins Family Endowed Scholarship

- Entering freshman student
- Automotive Technology curriculum
- Demonstrates potential for success

Bridge to Success Endowed Scholarship

- Established by R. Peter Heffering '51
- Assist students who have exhausted all their options for scholarships, loans, and other funds
- No curriculum restrictions

Goldie Burgess Endowed Scholarship

- Returning senior student
- Nursing curriculum
- Minimum 2.75 GPA
- Financial need

Bobbi Butler Burnham Endowed Scholarship

- Liberal Arts associate or bachelor degree program
- Preference will be given to anyone with a surname of Sharlow, Butler, or Burnham but not limited to those aforementioned names
- The scholarship is renewable for the following year of study providing that the student has maintained a 3.0 grade point average

Agnes and John N. Burns Family Endowed Scholarship

- Continuing student
- Business and one is open curriculum
- Preference to female students from Franklin, Jefferson, Lewis, or St. Lawrence County

Denice Glascock Button Women in Accounting Endowed Scholarship

- Continuing female student
- Enrolled full time in an Accounting program
- Satisfactory academic progress
- Committed to building a better community

Paul W. Calkins Endowed Scholarship

- Entering freshman student
- High school record exemplary
- Business curriculum

Canton Area Zonta Club Scholarship

- Returning senior student
- Resident of Town of Canton or, secondly, St. Lawrence County
- Single parent with potential for success
- Financial need

Canton College Foundation North Country Academic Scholarship

- Entering or continuing student in any curriculum
- GPA of 2.5 or higher or 85 high school GPA
- Open to full and part-time students

Canton Fund Annual Scholarship

- Entering or continuing student in any curriculum
- GPA of 2.5 or higher or 85 high school GPA

Canton Fund Endowed Scholarship

- Entering or continuing student in any curriculum
- GPA of 2.5 or higher or 85 high school GPA

Canton-Potsdam Hospital Guild Scholarship

- Canton-Potsdam Hospital employee in the Nursing program
- Selected by the employer
- Preference to non-traditional students

Carkner Construction Endowed Scholarship

- Student enrolled in the Construction Technology: Management or engineering curricula

Preston C. Carlisle Annual Scholarship

- Student from St. Lawrence County

Dr. Mary Ann Caswell Endowed Scholarship

- Preference given to students from St. Lawrence County
- Financial need

The Centennial Endowed Scholarship

- No restrictions on year or curriculum

Alden C. Chadwick Endowed Scholarship

- Continuing student
- Sports Management curriculum

The Chiavetta Catering Annual Scholarship

- Preference given to students enrolled in business or psychology
- Financial Need

Varick A. Chittenden Annual Scholarship

- Continuing student
- Exceptional North Country student

Clark-Guyette Internship Assistance Program Endowment

- Students participating in non-subsidized internships

- Preference given to St. Lawrence County students

Ed and Clara Cloce Endowed Scholarship

- Demonstrates potential for success
- Preference to Automotive Technology curriculum

Stanley Cohen Sports Management Endowed Scholarship

- Academic achievement
- Sports Management curriculum
- Financial need
- U.S. citizen

College Association Management Team Scholarship

- Annual scholarship supporting a student from the North Country area from the College Association Management Team

Conklin Family Nursing Scholarship

- Nursing student
- Preference to first generation student, or a veteran In the armed forces
- Financial Need

Dr. Solomon Cook Endowed Scholarship

- Native American
- Preference to student from the Akwesasne St. Regis Mohawk Reservation or graduate of Salmon River Central School
- High school average of B or better
- Financial need

Coombs-Muscarella Endowed Scholarship

- Entering freshman student
- Active in extracurricular activities
- Demonstrated leadership skills during high school

William C. Cooper Endowed Scholarship

- Entering freshman student
- Business or Computer Information Systems curriculum
- Resident of St. Lawrence or Otsego County
- Highly-motivated, industrious student

Corning Incorporated Endowed Scholarship

- Entering freshman student
- Electrical Engineering Technology curriculum
- Graduate of a St. Lawrence County high school
- Preference is given to students from low-income backgrounds who have overcome adversity

Criminal Justice Alumni Award

- Aid students in Criminal Justice field with expenses for internship

Financial Assistance

Criminal Justice Department Endowed Scholarship

- Students enrolled in Criminal Justice, Criminal Investigation, Law Enforcement Leadership and Management, or Homeland Security
- Selected by Criminal Justice Department Scholarship Selection Committee

Cross Connection Control Foundation Scholarship

- Entering freshman student
- Air Conditioning Engineering Technology curriculum

Evan M. Dana Endowed Scholarship

- Veterinary Science Technology or Liberal Arts and Sciences: Chemistry option curricula
- Good academic standing
- Incentive, motivation

Anthony "Tony" E. Darcangelo Memorial Scholarship

- Rome Free Academy student in two- or four-year Business curriculum
- Second preference to anyone from Rome Free Academy
- Third preference to Business student from Oneida County
- Financial need

Ethelyn B. Davis Endowed Scholarship

- Returning senior student
- Nursing curriculum
- Demonstrated compassion, thoughtfulness, concern for the patient's well-being
- Academic achievement secondary

The Day & Nite All Service Annual Scholarship

- HVAC Engineering Technology, Air Conditioning Maintenance and Repair, Heating and Plumbing Service, or Mechatronics curricula

William D. Demo Family Endowed Scholarship

- Entering freshman student and continuing student
- Graduate of St. Lawrence or Franklin Counties; preference give to Brasher Falls Central School

Gerard '65 & Patricia Desormeau Family Endowed Scholarship

- Entering or continuing student
- Electrical Engineering Technology
- Preference to Indian River School District
- Jefferson, Lewis, St. Lawrence Counties can apply
- Financial need

Rosa Dixon Allied Health Endowed Scholarship

- Allied Health curriculum
- Financial need

Lisa M. Tourville Donnelly '96 Annual Scholarship

- 1 Scholarship is awarded to a student enrolled in the Health and Fitness B. Tech program
- 1 Scholarship is awarded to a student from Northern Adirondack Central School, or a graduate from a Clinton County high school

Stuart B. Dragon Endowed Scholarship

- Entering freshman student
- First preference to Clinton County resident
- Secondly, any North Country resident

Professor Dr. Thomas and Virginia Duda Memorial Scholarship

- Two- or four-year non-traditional student
- Minimum 2.0 GPA
- Business curriculum

Duken Family Scholarship

- Entering freshman from Clinton County
- Preference to Seton Catholic High School, Plattsburgh High School, or other Clinton County school
- Strong interest and passion for Business; leadership skills in student, community, or religious activities

EDF Renewables Annual Scholarship

- Enrolled in the Electrical Construction & Maintenance Program
- Financial Need

David '80 & Tracy Elliott Endowed Scholarship

- Entering or continuing student
- Agribusiness or related agricultural program
- Preference to St. Lawrence, Franklin, Jefferson, Lewis and Clinton Counties

Employee Assistance Program (EAP) Scholarship

- Full- or part-time student who is an employee of SUNY Canton - State, College Foundation, or College Association
- If no employees are eligible, spouse or dependent of SUNY Canton employee will be considered
- Awarded by semester
- Financial need

Eurto Family Endowed Scholarship

- Non-traditional student majoring in a certificate, associate, or bachelor degree program

Betty Evans Endowed Scholarship in Memory of Perry Evans '75

- Entering or continuing student from an agricultural background who is enrolled in either a two- or four-year program
- Preference will be given to students who have had experience in 4H or a member of FFA

Robert W. and Helen Flanders Farmer Endowed Scholarship

- Entering freshman student
- Graduate of Tupper Lake High School
- High school record of good citizenship and academic achievement
- Strong motivation to succeed in college

William J. and JoAnne M. Fassinger Endowed Scholarship

- Transfer student from a New York State two-year learning institution
- Enrolled in Criminal Investigation
- Financial need

Daniel G. Fay Endowed Scholarship

- Student from St. Lawrence County
- Enrolled or planning to enroll in Accounting Program
- Demonstrate teamwork while being actively involved in student organizations and extracurricular activities in HS or college

George and Eileen Fay Endowed Scholarship

- Entering freshman student
- Graduate of Massena Central School or Canton Central School
- High school record of good citizenship, extracurricular activities, and academic achievement
- Preference to Business curriculum
- Financial need

Linda Lahey Fay Nursing Endowed Award

- Graduating senior student
- Assisted fellow students/faculty members

Kevin Fear '87 Endowed Scholarship

- Assist a student who has a learning disability
- Any curriculum

Bryan and Joan Felitto Family Endowed Scholarship

- Entering freshman student
- Graduate of a North Country High School, preference to Ogdensburg Free Academy or Massena Central School
- 85 high school average
- Demonstrate leadership potential by participating in student organizations

Financial Assistance

Alyson E. Felt '12, '20 Annual Scholarship

- Female student enrolled/enrolling in a healthcare degree
- Excellent academic track record with demonstrated financial need

Fitch Campus and Community Leadership Scholarship

- Demonstrates leadership in high school or current Institution of higher education and community. Evidence of leadership through demonstrated community engagement must be ongoing in order to retain
- Preference given to an out-of-state student
- preference given to a student planning on pursuing bachelor's degree
- demonstrates academic success by maintaining a minimum cumulative semester GPA of 3.5

Clement J. Flanagan Endowed Scholarship

- Entering freshman student
- Graduate of Canton Central High School
- Involvement in high school/community activities
- Financial need

Tod Flanagan Scholarship

- Entering or continuing student
- HVAC Engineering Technology, HVAC Trades or Electrical Engineering Technology programs
- Financial need

Nicole Fleury Memorial Endowed Scholarship

- Veterinary Science Technology major
- Graduate from a Section X high school
- Must demonstrate leadership, compassion, and a love for animals

The Fergal I. '80 and Colleen Foley Endowed Scholarship

- Emergency Management Curriculum
- Preference to a US military veteran

David A. Frary and Family Endowed Scholarship

- Continuing student
- Graduate of a St. Lawrence County high school
- Business curriculum
- Financial need
- Preference to candidates intending to pursue a baccalaureate degree

Albert E. French Endowed Scholarship

- Continuing student
- Financial need

Gerlach Family Endowed Scholarship

- Nursing student

Lawrence Germain Endowed Scholarship

- Entering or continuing students
- Veterinary Science Technology curriculum
- Financial need

Gilbert, Chadwick, and Christy Investment Club Scholarship

- Continuing student
- Business curriculum

John A. Goetze Endowed Scholarship

- Continuing student
- Construction Engineering Technology or Engineering Science, or Civil Engineering Technology curricula

Cleo J. Golding Endowed Scholarship

- Entering freshman student
- Financial need

Lewis and Martha Goldstein Endowed Scholarship in Engineering Technology

- Enrolled or planning to enroll in engineering curricula
- Good citizenship and community engagement
- Financial need

Goolden Family Endowed Scholarship

- Entering freshman student
- Mortuary Science or Business curricula
- St. Lawrence, Jefferson, or Franklin County resident
- Preference to candidates from Madrid or Waddington
- Leadership potential and ethical values

Grace Family Nursing Scholarship

- Student enrolled in the Nursing bachelor's degree program
- Must be enrolled at least 6 credit hours
- St. Lawrence County resident
- Recommended by the Nursing faculty
- Financial need

Grosvenor '69 Annual Scholarship

- Entering freshman student
- Demonstrates financial need
- First preference given to a graduate of Harpersville, Afton, or Windsor high school enrolled in a civil-related, construction-related, other engineering-related, or veterinary technology-related program
- Second preference is given to a graduate of a Broome County high school, enrolled in a civil-related, construction-related, other engineering-related, or veterinary technology-related program

David V. Guccione Endowed Scholarship

- Criminal Justice or Criminal Investigation degree
- Senior Criminal Justice Investigation enrolled in David A. Sullivan Police Academy

- Secondary consideration to a student enrolled in Correction Academy

Dr. Jonathan Gueverra Endowed Scholarship

- Awarded to student in Business or Criminal Justice curricula
- Either two- or four-year degree students

Harriett Gushea/Massena Memorial Hospital Nursing Endowed Scholarship

- Massena Memorial Hospital staff member in the Nursing program

Hahn-Kalberer Endowed Scholarship

- Senior student, must be in two-year curriculum
- Non-traditional, 23 years or older
- Must have at least a 3.0 GPA
- Full tuition
- Separate application required

Haig Family Endowed Scholarship

- Continuing full-time student

John L. Halford, Sr. Endowed and Memorial Scholarship

- Entering freshman student, to be retained with 2.5 GPA
- Good academic standing
- Awarded to a graduate of Gouverneur Central School who is enrolled in a four-year degree program
- Financial need

John L. Halford, Sr., '49 Nursing Endowed Scholarship

- Student enrolled in four-year Nursing program
- Currently employed as a nurse in St. Lawrence County or originally from St. Lawrence County

Delta Sigma Tau - Shari Hall-Smith '76 Memorial Annual Scholarship

- In person degree program
- Serve as an officer or member of the board of a campus club or organization, including Greek Organizations, or a campus-wide advisory board
- Preference shall be given to a student who has exhibited a passion for serving their community

Maurice B. "Mick" Harrington Scholarship Endowment

- Continuing student in Business Administration or Sports Management
- 3.0 GPA to be eligible

Catherine Wells Hart Endowed Scholarship

- Pursuing a STEM-related degree within the Canino School of Engineering
- Committed to promoting gender equity in STEM disciplines
- Preference is given to a student from St. Lawrence, Essex, Clinton, Jefferson, Lewis, Hamilton, or Warren Counties

Henning-Keeler Endowed Scholarship

- Students in Liberal Arts/Humanities or technical program
- Meritorious academic record
- Separate application required

Heuvelton Central School Alumni Endowed Scholarship

- Entering freshman student
- Graduate of Heuvelton Central School
- Earned at least a “B” average through first 3-1/2 years of high school
- Good relationship with teachers and peers
- No history of drug or alcohol abuse
- Financial need

Hirschey Family Business and Accounting Endowment

- Student must be enrolled in a Business or Accounting curriculum
- Resident of Jefferson, Lewis, or St. Lawrence County in that preferential order

Dr. Harry E. Howe Endowed Scholarship

- Continuing student
- Nursing curriculum
- Minimum 3.0 GPA
- Demonstrates nursing professionalism

Henry Lawrence Howe V Endowed Scholarship

- Continuing student
- Learning disabled
- Preference to graduate from St. Lawrence County pursuing careers in technical fields, especially in computers or electrical/electronics

Teresa Dowe Huggins '82 Memorial Annual Scholarship

- Demonstrated financial need
- 1 Scholarship awarded to a student enrolled in Applied Psychology
- 1 Scholarship awarded to a student enrolled in engineering
- Preference to a student who demonstrates leadership

Lloyd J. '92 and Paula King '80 Hurlbut Endowed Scholarship

- St. Lawrence or Jefferson Counties
- Financial need

Paula Bouchard Jacques Endowed Scholarship

- Continuing student
- Must have earned “B” or better in Nursing 101
- Assisted fellow students in learning
- Demonstrated strong assessment skills, effective communication skills, and respect and caring for elderly client
- Announced at Nursing Program Pinning Ceremony; awarded during following academic year or semester

Charles W. Johnson Endowed Scholarship

- Entering freshman student
- High school academic record meritorious
- Preference accorded to Liberal Arts: General Studies/Undeclared Major or Graphic and Multimedia Design who indicates an interest in majoring in the media

Grace Jones-Vesper Business Scholarship

- Continuing student
- Business Administration curriculum
- Must have maintained a B average
- Preference to a non-traditional student

Betsy B. Kaplan Memorial Endowed Scholarship

- Continuing students in Veterinary Science Technology curriculum
- To go to students who have demonstrated past involvement in animal welfare, work at a humane society or similar organization, or caring for abused animals in one's own home.

Jesse Kaufman Endowed Scholarship

- Entering freshman student
- Electrical Engineering Technology curriculum

Catherine M. Kelly Endowed Award for Excellence in Psychiatric Nursing

- Presented annually by the Nursing faculty to a graduating senior Nursing student who has a B or better average
- Demonstrates clinical excellence
- Strong interpersonal relationship skills
- A commitment to nursing of psychiatric clients

E.B. and Gladys Kennedy Endowed Scholarship

- Continuing student
- Commitment to community service
- Financial need

Dr. Joseph L. and Dine Kennedy Endowed Scholarship

- Student in a four-year degree program
- Demonstrated high academic achievement in high school or while attending SUNY Canton

Harry E. King Endowed Scholarship

- Entering or continuing student
- Air Conditioning Engineering Technology curriculum or Alternative and Renewable Energy Systems

Richard C. King Endowed Scholarship

- Continuing student
- Veterinary Science Technology curriculum
- Good academic standing

Lloyd and Josephine Kingston Endowed Scholarship

- Entering freshman student
- Business curriculum
- St. Lawrence County resident
- Preference to graduate of Canton Central School

Walter R. Kingston Endowed Scholarship for Automotive Technology

- Entering freshman student
- Automotive Technology curriculum
- Preference given to Canton or St. Lawrence County students
- Financial need

Lewis and Martha Goldstein Endowed Scholarship in Engineering Technology

- Enrolled or planning to enroll in engineering curricula
- Good citizenship and community engagement
- Financial need

Ernest C. Krag Endowed Scholarship

- Entering freshman student
- Liberal Arts-Social Science curriculum
- First preference to a student planning to pursue studies in government and history; second preference to a student from St. Lawrence or Franklin County; third preference to a Native American student

Edwin Krenczeski Memorial Scholarship

- Entering or continuing student
- Electrical Engineering Technology curriculum
- Financial need

Craig Larkin New Beginnings Scholarship

- Entering or continuing student
- Enrolled in Homeland Security or Emergency Management
- Documented disability
- Maintain 3.0 GPA

Financial Assistance

Aaron J. Lasher Endowed Scholarship

- Awarded annually to a deserving student
- One-year Heating & Plumbing certificate, returning student in Air Conditioning Engineering Technology two-year program, or the Alternative and Renewable Energy Systems four-year program
- Preference to Heuvelton Central School graduate, secondly to a St. Lawrence or Jefferson County graduate
- Financial need

Garnett M. Lawrence Endowed Scholarship

- Entering freshman student
- Massena Central High School graduate
- B average
- Good relationships with teachers and peers
- No history of alcohol or drug abuse

Gordon and Beatrice Lawrence Endowed Scholarship

- Entering freshman student
- St. Lawrence Central School graduate
- B average through junior year of high school
- Have good relationship with teachers and peers
- Have no history of alcohol or drug abuse

The Levato Family Endowed Scholarship

- Any degree program
- Community involvement

Liberty Utilities Scholarship

- Business or Canino School of Engineering Technology curriculum
- North Country resident

Frederick C. and Karen Liebi Endowed Scholarship

- May be awarded to freshman or continuing student
- Awarded to Construction majors first, then to Canino School of Engineering Technology curricula.

C. Ernest and Dorothy B. Lowery Endowed Scholarship

- Continuing student
- Demonstrate academic excellence
- Financial need

Albert F. and Agnes Powers Luck Endowed Scholarship

- Entering freshman or continuing student
- Preference accorded to students from Seton Catholic Central or Plattsburgh High School; second preference to a resident of Clinton, Essex, or Franklin County
- Civil or Construction Engineering Technology curriculum

Joel Lynde-Strive for Excellence Award

- Entering or continuing student
- Engineering program with preference to Air Conditioning Engineering Technology

Dr. Earl W. MacArthur Honors Scholarship

- Entering freshman
- Must meet two of the following categories:
Top five percent of high school class; 93 or better high school average; combined SAT of 1250 or ACT of 28 or better
- Must maintain 3.25 GPA to retain scholarship

Joyce A. MacArthur/CTC Women Endowed Scholarship

- Continuing student
- Outstanding scholar
- Demonstrates exemplary college or community service

Dale D. Major '70 Endowed Scholarship

- Resident of Verona, Vernon, or Sherrill
- Financial need

Dr. Michael and Barbara Maresca Family Endowed Scholarship

- Awarded to both an entering freshman and continuing student in the Nursing program
- Preference given to students demonstrating leadership skills and community service
- Preference given to students from Canton-Potsdam Hospital and Massena Memorial Hospital areas
- Financial need

Massena Alumni Endowment Scholarship

- Entering freshman student
- Enrolled in a two- or four- year program
- Financial need

David R. Maynard Endowed Scholarship

- Entering freshman student
- Academic and extracurricular high school activity meritorious
- Financial need

Fulton and Anna McAllister Endowed Scholarship

- Continuing student
- Nursing curriculum
- St. Lawrence County resident
- Demonstrated academic improvement
- Financial need

Virginia McAllister Endowed Award for Excellence in Nursing

- Graduating senior student
- Nursing curriculum
- Demonstrate academic and clinical excellence and initiative

- Awarded at pinning ceremony

Kenneth R. McDonald/Howland Pump Endowed Scholarship

- Either freshman or continuing student
- Air Conditioning Engineering Technology or Heating and Plumbing curriculum
- St. Lawrence County resident

Robert McKenty and Family Scholarship

- Awarded annually to a student in a Construction-related program
- Financial need

Merriman Family Endowed Scholarship

- Entering freshman student
- High school record, academics, and extracurricular activities with merit
- Graduate of Colton-Pierrepont Central School, Norwood-Norfolk Central School, or Potsdam Central School
- Financial need

Susanne Connick Merritt Endowed Scholarship

- Returning student; must have completed two semesters of full-time study at SUNY Canton in a Business curriculum
- Outstanding scholar
- Participation in extracurricular activities on and off campus

Richard W. Miller Endowed Scholarship

- Entering freshman and continuing students
- Electrical Engineering Technology curriculum or technical curriculum

Richard W. Miller Academic Excellence Award

- Continuing student
- Canino School of Engineering Technology
- Academic excellence

Modell Family Endowed Scholarship

- Entering or returning student in Electrical Engineering Technology curriculum
- Preference to student from Onondaga County

Donald M. Morgan Memorial Endowed Scholarship

- Continuing student who is a graduate from Knox Memorial Central School or Edwards-Knox Central School
- Maintain a 2.75 cumulative GPA

Rosanna Mae Moser Endowed Scholarship

- International student
- Enrolled in a Business curriculum
- Financial need

Financial Assistance

Peter Nevaldine Endowed Scholarship

- Entering freshman student or continuing student
- Engineering Technology or one-year certificate program in Canino School of Engineering Technology

New York State Federation of Home Bureaus, Inc., in Honor of Audrey J. Hall Scholarship

- Continuing full-time student
- Early Childhood or Nursing curriculum
- 2.85 or better GPA
- Resident of counties where there are organized chapters of New York State Federation of Home Bureaus, Inc.
- Separate application needed

Allan P. and Catherine Barnett Newell Endowed Scholarship

- Continuing student
- North Country student from Clinton, Essex, Franklin, Jefferson, Lewis, or St. Lawrence Counties
- First preference to, but not restricted to, Veterinary Science Technology majors
- Evidence of leadership qualities, service to community, and participation in a variety of extracurricular activities will be viewed upon favorably in the selection process
- The recipient must maintain a 3.0 GPA to retain the scholarship for a consecutive semester of study
- Financial need

Elwood J. Nicholson, Jr. Endowed Scholarship

- Entering freshman student
- Recipient shall be Engineering Technology and Science and performance in and out of classroom exemplary
- Preference to Air Conditioning Engineering Technology/Heating and Plumbing Service

Robert A. Noble, Sr., Endowed Scholarship

- To further the talents of youth in engineering and nursing
- Entering or returning senior student
- Electrical Engineering Technology or Nursing curriculum
- Vermont or North Country resident

Elsie Lucy (Cole) Norton Endowed Scholarship

- Entering or returning student
- Resident of St. Lawrence County
- Preference to a student from the Canton area
- Early Childhood program
- Retain the scholarship if GPA is 3.0 or better

Novelis Aluminum Annual Scholarship

- Enrolled in Electrical Engineering Technology AAS, or Mechanical Engineering AAS
- Preference given to students who graduated from a NYS high school, or non-traditional students who reside in NYS

John G. A. and Chloe Ann R. O'Neil Endowment

- No restrictions

John P. Ouder Kirk Endowed Scholarship

- Continuing student
- Bachelor's degree program in Alternative and Renewable Energy Systems, Mechanical Technology, Electrical Technology, or Civil and Environmental Engineering Technology
- Financial need

The Dr. Diane Para Outstanding Senior Internship Award

- Demonstrates excellence in academics and service within the Sports Management Program
- Given to a student enrolled in an internship for the Sports Management Program

Ornella T. Parker '14 Endowed Scholarship

- Resident of the Bronx, Brooklyn, Queens, Manhattan or Staten Island
- Self-identified as black
- Student leadership, extra-curricular or community organization involvement
- Financial need

Beth Patri Endowed Scholarship

- Preference given first to a graduate of Cicero-North Syracuse High School, then to a student from Onondaga/Chautauqua County
- Preference is given to a student in an art-related program

David and Susan Penepent Annual Scholarship in Mortuary Scholarship

- Non-traditional student and/or severe financial need
- Enrolled or planning to enroll in Mortuary Science

Michael J. Perry Memorial Endowed Scholarship

- Student enrolled in any program
- Student overcame serious challenges in order to pursue a college degree

Dr. William F. Peters Tech Prep Endowed Scholarship

- Entering freshman student
- BOCES graduate
- Preference to Tech Prep participants

Bruce Petrie Memorial Endowed Scholarship

- St. Lawrence or Oswego County student

Phi Theta Kappa Endowed Scholarship

- Continuing student
- Must show leadership qualities and have participated in college and community activities
- Must have at least a 3.75 cumulative GPA

Elaine Claxton Pidgeon Endowed Scholarship

- Continuing student
- Nursing curriculum
- Demonstrates academic excellence

The Jonathan T. Pinckney '18 Entrepreneur Scholarship

- Preference given to a student who demonstrates an entrepreneurial spirit or creative business mind
- Preference given to a student interested in entrepreneurship

Plumbing, Heating, and Piping Contractors of Northern New York Endowed Scholarship

- Entering freshman student
- One-year Heating and Plumbing curriculum
- Resident of Jefferson, Lewis, or St. Lawrence County
- Financial need

Harry and Ella Winslow Podgurski Endowed Scholarship

- Entering freshman student
- Canino School of Engineering Technology
- Massena Central School graduate
- Has been a positive member of the high school community

The Olive Porteous Annual Nursing Scholarship

- Nursing Student
- Financial Need

Jean M. Poticher Endowed Scholarship

- Entering freshman student
- Resident of St. Lawrence County
- Enrolled in a Business curriculum

Lorence F. Pries Endowed Scholarship

- Continuing student
- Electrical Engineering Technology curriculum
- Participation in extracurricular activities

Promises Kept Scholarship

- Incoming student
- Self-Identifies as black
- Financial need

Financial Assistance

Purcell Construction Annual Scholarship

- Final year of the Civil & Environmental Engineering B. Tech, or Construction Tech Management A.A.S.
- Preference given to students who graduated from a high school in St. Lawrence, Jefferson, or Lewis Counties

David P. Ramsey '72 Annual Scholarship

- Preference given to first generation students pursuing a degree in science/health-related field

Alexander Reed Automotive Equipment Scholarship

- Awarded in the Spring semester
- Third semester Automotive Technology student to use to purchase tool

Bernard Creighton Regan Endowed Scholarship

- Freshman or continuing student
- Massena Central School graduate preferred; if not one available, then St. Lawrence County
- Electrical or Air Conditioning Engineering Technology
- Financial need

Gerald E. and Corinne C. Rice Endowed Scholarship

- Entering freshman or returning student
- Canino School of Engineering Technology
- Preference to non-traditional student

Joseph and Carolyne Rich Family Endowed Scholarship

- Non-traditional student
- Jefferson County resident
- Human Services field - Liberal Arts or Psychology
- Financial need

W. Stanley and Alice E. Richardson Endowed Scholarship

- Continuing student
- Enrolled in a Business curriculum
- Student from St. Lawrence County
- Meritorious academic record and motivation to succeed in business

Marjorie J. Rock Endowed Scholarship

- Non-traditional Nursing student
- Must have at least one year prior nursing experience
- Resident of St. Lawrence County
- Desires employment after graduation in the North Country

Carol Sue (Morse) '53 and Paul A. Rosenberg Endowed Scholarship

- Two- or four-year program in human health care studies
- Financial need

Rosser Family Endowed Scholarship

- Entering freshman or returning student in business, health-related, education-related, construction-related or public service
- From either Western New York or Northern New York
- Preference given to student from Orchard Park, Canton, or St. Lawrence Central High Schools
- Renewable with 3.0 GPA
- Awarded based on merit and character

Laura Rose Rozell '69 Endowed Scholarship

- Second year student continuing studies in four year baccalaureate program
- Accounting or related field
- Highest GPA in Accounting determined by the Dean of SBLA or faculty

John F. Ruitberg Endowed Scholarship

- Entering freshman
- Student from St. Lawrence County
- Business or Liberal Arts-Social Science curriculum

The Thomas '71 and Barbara (Gahren) '71 Annual Early Childhood Scholarship

- Early Childhood student
- Financial Need

The Thomas '71 and Barbara (Gahren) '71 Endowed Early Childhood Scholarship

- Early Childhood student
- Financial Need

Alex Sabo Mentoring Endowed Scholarship

- Entering freshman
- Financial need
- Enrolled in two to four year program
- Applicants recommended by Massena High School Guidance Department
- Enrolled in Finance or Business curriculum

The Saguaro Endowed Scholarship

- Entering or continuing student
- Any curriculum
- Financial need

William and Beatrice Schermerhorn Endowed Scholarship

- Continuing student
- Veterinary Science Technology curriculum
- Demonstrates a humane ethic and a personal commitment to animals

Seacomm FCU Financial Literacy Endowed Scholarship

- Entering or continuing student
- St. Lawrence or Franklin Counties
- Studies financial literacy
- Must have 3.0 GPA

- Major or minor in Business field
- Preference to Finance, Accounting, Business Administration or Management

Judy Sharpe Sitterley and Richard Sitterley Annual Scholarship

- Student in STEM (Canino School of Engineering, or School of Science, Health, and Criminal Justice
- Would also consider Accounting A.A.S. and Finance B.B.A. as a secondary choice
- Demonstrated financial need
- Preference given to a student from an military family, either as a spouse or child of an active service member, or a retired service member

Sheila Smith '82 Endowed Scholarship Encouraging Women In STEM

- Pursuing a STEM-related degree within CSOET or SHCJ
- Is committed to promoting women in STEM and/or gender equity in STEM disciplines
- Must have a 3.0 GPA or 85 high school average

Margaret D. Sovie Endowed Scholarship

- Second-year Nursing student who has demonstrated a compassionate outlook and eagerness to become a registered nurse
- Chosen by the consensus of the Nursing faculty
- Second award to a graduate of Ogdensburg Free Academy enrolled in the Nursing curriculum

The John A. and Shirley Ann Spellacy Endowed Scholarship

- Student enrolled or planning to enroll at SUNY Canton in any program in the School of Business & Liberal Arts
- Evidence of leadership and community engagement, as demonstrated through participation in campus organizations or events, and/or volunteer work on campus or in the students' home community.
- Financial need

Bill and Peg Stalder Endowed Scholarship

- Entering freshman student
- St. Lawrence County resident

St. Lawrence Federal Credit Union Scholarship

- Deserving student from St. Lawrence County

St. Lawrence State Hospital School of Nursing Alumni Association Endowed Scholarship

- Continuing student
- Nursing curriculum
- Empathy, leadership, patient advocacy
- North Country resident

Stitt Family Endowed Scholarship

- Entering freshmen student
- Preference given to Ogdensburg Free Academy or Heuvelton Central School graduates
- Secondary preference given to student from St. Lawrence County

Kenneth '99 & '01 and Andrea '02**Stagnari Annual Scholarship**

- Financial Need
- Maintain 3.0 GPA and demonstrates leadership qualities
- Preference given to child of Delta Kappa Sigma Fraternity or other Greek Organization

Jay F. Stone Endowed Scholarship

- Entering freshmen student
- Air Conditioning Engineering Technology

John H. and Eunice B. Stone Endowed Scholarship

- Continuing student from Jefferson or Lewis County
- Preference to part-time student
- Financial need

David W. Sullivan Memorial Endowed Scholarship

- Entering freshman student
- Criminal Justice curriculum
- Graduate of a St. Lawrence County high school
- School or community service involvement

SUNY Canton/Empire State Diversity Honors Scholarship

- Entering freshman or continuing student
- High school average B or better
- Native American, African American, or Hispanic
- Recipients maintaining a 2.75 GPA may retain the scholarship for a second year of study

SUNY Canton EMS Program Annual Scholarship

- Demonstrated financial need
- Active member of the SUNY Canton EMS program

SUNY Canton Student Veteran's Association and John L. Halford, Sr., '49 Endowed Scholarship

- Veteran or spouse/child of a veteran who received an honorable discharge from any branch of the United States Armed Forces
- Priority ranking for the award should be:
- Purple Heart recipient
- Combat veteran wounded in action
- Spouse or child of a veteran killed in action
- Combat veteran
- Veteran who served overseas but did not see combat action

- Veteran who served in the continental United States

- Direct spouse or child of a veteran

W. H. Swart '51 - Veteran Recognition Endowed Scholarship

- Veteran honorably discharged from the US Armed Forces
- Preference to combat veteran wounded in action or child of veteran killed in action
- Unwounded combat veteran
- Veteran graduate from Deposit Central High School
- Veteran who served overseas with no combat action
- Veteran who served in continental United States
- Direct child, nephew, or niece of veteran

Daniel J. Sweeney '75 Delta Kappa Sigma Fraternity Leadership Endowment

- Entering or continuing student
- Performs well academically and demonstrates leadership within their community, in athletics, in student government, or any other area
- Strong financial need
- Preference given to son/daughter of a brother of Delta Kappa Sigma

Simona Szafran Endowed Scholarship

- Entering or continuing student
- Enrolled in Early Childhood Development program

Mark Szafran Memorial Endowed Scholarship for Students Overcoming Adversity

- Students who have shown great character, determination, and a strong sense of purpose through overcoming adversity and are committed to improving the lives of others, as evidenced through their volunteer activity, community involvement, and civic engagement, either on campus or in events and activities in their home communities.

Zachary R. Tartell '15 Nursing Scholarship

- Continuing non-traditional student in 2-year Nursing curriculum with interest in cardiology or critical care
- Preference to 3.0 GPA or higher

Myrna F. Thomas '79 Endowed Scholarship

- Entering with GPA of 3.0 or higher
- Financial need
- Studying Business including Finance
- Preference to students majoring in Accounting

Tracey L. Thompson Endowed Scholarship

- Financial Need
- Demonstrate strong evidence of volunteer work on/off campus, or participation in campus organizations or activities
- Preference given to students who have overcome adversity or are choosing to attend college despite challenging life circumstances

Tiberio Family Endowed Scholarship in Memory of Lena Chadwick

- Entering or continuing student
- Student must be enrolled in a business curriculum, including Finance or Management
- Preference will be given to students who are enrolled in Accounting
- High school average must be a 3.0 or higher
- Financial need

T. J. Toyota and Cloce Family Endowed Scholarship

- Entering or continuing student
- Automotive Technology curriculum
- Performance must demonstrate potential for success

Tougher Industries, Inc. Endowed Scholarship

- Entering freshman student
- Air Conditioning Engineering Technology curriculum
- Financial need

Harold C. Town Endowed Scholarship

- Entering freshman student
- Graduate of Norwood-Norfolk Central School
- Meritorious high school record

Carl W. Trainor Family Scholarship Endowment

- Continuing student in the Mortuary Science or Health Science curricula
- First preference to a resident of Boonville or Lewis County
- Second preference to a North Country resident

Tuper Automotive Student Textbook Scholarship

- Second year student
- Enrolled in Automotive Technology
- Used to offset cost of required textbooks and supplies
- Must walk at Graduation Ceremony

James M. and Charlene Tyler Endowed Scholarship

- Continuing student who had challenges in high school but has excelled academically during first year

- This is a merit award recognizing the change in the student's performance and accomplishment at SUNY Canton
- Should the student's performance continue to excel, this scholarship is renewable if the student wishes to earn a bachelor's degree

Rosella Todd Valentine Endowed Scholarship

- Business degree program
- North Country resident

Ronald '62 and Annette Van Allen Annual Scholarship

- Supports students pursuing study in the field of nursing
- Student from Western, NY
- Financial need

William K. Viertel Memorial Endowed Scholarship

- Excellence in Math or Chemistry
- Preference given to a student enrolled in an engineering related program. Secondary preference given to health science or business major.
- Financial need

William C. Vining and Dr. Judson R. Vining Endowed Scholarship

- Entering student in Nursing program

Arlington Walker Endowed Scholarship

- Continuing student
- Criminal Justice curriculum
- Resident of St. Lawrence County

The James '77 and Susan Waters Endowed Scholarship

- Continuing, entering, or transfer student
- Civil Engineering Technology A.A.S program or Civil and Environmental Engineering Technology Bachelors program
- Financial Need

John H. Wells Memorial Endowed Scholarship

- Entering freshman or returning student
- Air Conditioning Engineering Technology or Alternative and Renewable Energy Systems or Heating and Plumbing curriculum

Arthur S. Wheeler Endowed Scholarship

- Entering or continuing student
- Preference to student from Town of Oswegatchie, Heuvelton, or Lisbon
- Pursing Agriculture related curriculum or Veterinary Technology

Guilford White '68 Endowed Scholarship

- Entering or continuing student in the Canino School of Engineering Technology
- Preference to Civil Engineering Technology or Construction Technology: Management
- Financial need

Frederick S. and Barbara R. '53 & '70 Wilder Endowed Scholarship

- Non-traditional student from Northern New York in their second year of Nursing RN degree program or third or fourth year of Nursing Bachelor degree program

Gregg and Anne Coloton Williams '78 Endowed Scholarship

- Entering or continuing student
- No restrictions
- Demonstrated good citizenship by being in extracurricular activities and community service activities

Woodcock Family Endowed Scholarship

- Continuing students
- Financial need
- Preference to students from St. Lawrence County, then Onondaga County
- Mechanical Engineering Technology curriculum
- Additionally, to students in any curriculum with special preference to women

Woodside Family Endowed Scholarship

- Entering freshman or continuing student
- Air Conditioning Engineering Technology curriculum
- Preference to students from St. Lawrence or Erie County
- Financial need

Katherine Wyckoff '77 Endowed Scholarship

- Either entering or continuing Nursing student
- Preference to non-traditional student
- Financial need

Zeta Alpha Phi Fraternity Student Leadership Initiative

- Student involved in campus activities
- Maintain 2.5 GPA
- Financial need

SATISFACTORY ACADEMIC PROGRESS

FEDERAL AID

(Federal Direct Student Loans, Federal Direct Parent Loans, Federal Work-Study, Federal Pell Grant, Federal SEOG Grant)

Students receiving federal financial aid are required to maintain minimum program pursuit and academic progress standards in order to continue to receive assistance. Use the chart below for your degree program to determine your minimum requirements.

STATUS	ATTEMPTED CREDITS/REQUIRED GPA					
	1-23	24-35	36-47	48-59	60-71	72+
Minimum GPA Requirement	1.25	1.5	1.75	2.0	2.0	2.0
Percentage of Attempted Credits Successfully Completed	50%	50%	66.7%	66.7%	66.7%	66.7%

Additionally, students are required to complete their degree with 150% of a normal timeframe. Attempted hours will vary with required program lengths, see examples below.

Example 1: For a 60 credit hour degree program, you must complete it with 90 attempted hours. (90 attempted Credit Hours/60 Passed Credit Hours = 150%)

Example 2: The Nursing Associate Degree requires 65 credit hours. 65 Passed Credit Hours x 1.5 (150%) = 98 credit hours may be attempted.

Total attempted hours will be used regardless of any program changes that have occurred (switching majors, etc.). Grades of "W" count towards total attempted hours. Repeated courses that were previously passed count only once. Remedial courses that are not credit-bearing do not count in the total attempted hours.

Courses enrolled in each semester must be applicable to the students' current degree program.

FAILURE TO MEET MINIMUM STANDARDS (Please be aware that these are not the same as the Academic Recovery & Suspensions given out by the Dean's Offices.)

STEP 1 – FINANCIAL AID WARNING

A student who does not meet the required minimum standards will automatically be given a one-time warning semester. This gives the student an opportunity to correct any deficiencies without losing federal aid eligibility. If a student withdraws from college, they have not met academic progress requirements.

STEP 2 – FINANCIAL AID TERMINATION

A student who fails a second time to meet the minimum standards will lose all federal aid eligibility. Eligibility can only be regained once they are again meeting the minimum standards.

WAIVER REQUESTS

If failure to meet standards is due to extenuating circumstances beyond a students' control, they may apply for a one-time waiver. All waiver applications must include full documentation and will be reviewed by the Financial Aid Appeals Committee. Director. Approval is not guaranteed. If approved the student will be given an academic plan to maintain eligibility.

NEW YORK STATE AID (NYS TAP Grant)

Students receiving financial aid are required to maintain minimum program pursuit and academic progress standards in order to continue to receive assistance. Use the chart below to determine your minimum requirements.

• If you received TAP at another college, be sure to include that in the number of TAP points you have received.

Certificate/Associate Degree Programs (Remedial Students*)

* Remedial Students are EOP Students, or any student required to take at least 2 remedial courses with the first two semesters.

TAP Points Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
6	3	0.50	50%/6 credits
12	9	0.75	50%/6 credits
18	18	1.30	75%/9 credits
24	30	2.00	75%/9 credits
30	45	2.00	100%/12 credits

Certificate/Associate Degree Programs (Non-Remedial Students)

TAP Points Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
6	6	1.30	50%/6 credits
12	15	1.50	50%/6 credits
18	27	1.80	75%/9 credits
24	39	2.00	75%/9 credits
30	51	2.00	100%/12 credits

Bachelor Degree Programs (Remedial Students*)

* Remedial Students are EOP Students or any student required to take at least 2 remedial courses with the first two semesters.

TAP Points Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
6	3	1.10	50%/6 credits
12	9	1.20	50%/6 credits
18	21	1.30	75%/9 credits
24	33	2.00	75%/9 credits
30	45	2.00	100%/12 credits
36	60	2.00	100%/12 credits
42	75	2.00	100%/12 credits
48**	90	2.00	100%/12 credits
54**	105	2.00	100%/12 credits

** EOP Students Only

Bachelor Degree Programs (Non-Remedial Students)

TAP Points Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
6	6	1.50	50%/6 credits
12	15	1.80	50%/6 credits
18	27	1.80	75%/9 credits
24	39	2.00	75%/9 credits
30	51	2.00	100%/12 credits
36	66	2.00	100%/12 credits
42	81	2.00	100%/12 credits

FAILURE TO MEET MINIMUM STANDARDS

If a student fails to meet state academic progress requirements as outlined above at the end of the semester, they will lose eligibility for the next semester they attend. Eligibility will be regained once they meet the above standards. Additionally, students' who stop attending for more than one year may regain eligibility upon return for one semester (students with 24 TAP points must have a 2.0 overall GPA). Then you must meet academic progress criteria each subsequent semester.

- If a student withdraws from college, they have not met academic progress requirements (automatic).

WAIVER REQUESTS

If failure to meet standards is due to extenuating circumstances beyond a students' control, they may apply for a one-time waiver. All waiver applications must include full documentation and will be reviewed by the Financial Aid Appeals Committee.. Approval is not guaranteed

IMPORTANT THINGS TO KEEP IN MIND

- Grades of "W" and transfer credits count towards total attempted hours.
- Remedial courses that are not credit-bearing, will not count in the total earned hours.
- Repeated courses that were previously passed do not count as earned hours for the semester.
- Courses enrolled in each semester must be applicable to the students' current degree program.
- Repeating any course in which a passing grade has already been received (D or above) will not count for TAP eligibility, unless the college catalog states a higher grade is required for the student's current curriculum.



The Academic Program

RESPONSIBILITIES

FACULTY RESPONSIBILITIES

Faculty members have the responsibility of ensuring an educational environment that promotes academic excellence. All individuals have the right to a positive secure environment, one in which persons can realize their potential as intellectual, social, political, economic and creative beings.

STUDENT RESPONSIBILITIES

It is the students' responsibility to know and abide by the requirements for their programs and courses published in college publications and course outlines. Further, it is the students' responsibility to utilize the college environment, resources and professionals therein to meet requirements which shall assist in both academic and personal growth.

SCHEDULING, ATTENDANCE, GRADES, CONDUCT

SCHEDULING

The Registrar prepares a master schedule for each session of the College. The normal college academic day is 8 a.m. to 10 p.m.

The Registrar arranges for and coordinates the registration of new and returning students for each semester. The Advising Center coordinates the registration of new students. Faculty advisors will assist students with appropriate selections to meet their program requirements; however, the responsibility for meeting all graduation requirements is that of the student. Following advising, continuing students schedule their classes for the subsequent semester through secure access to the online student information system (called UCanWeb). Should a student fail to register by the appropriate registration deadline date, a \$50.00 non-refundable late registration fee will be assessed. Students who do not register by the deadline may register for courses

on a space-available basis. (Please note that only courses required for a student's current curriculum will be considered eligible for federal and state financial aid).

MAXIMUM STUDENT LOAD

Nineteen credit hours will constitute a maximum course load for fall, spring, and summer term semesters; seven credit hours is the maximum course load for winter term. Degree students may seek permission for additional hours from the Dean of the School in which the student is enrolled. Non-degree students may seek permission for additional hours for summer term from the Provost's Office, and for winter term, from the Director of Advising.

ATTENDANCE

Students are expected to accept full responsibility for meeting all of the academic requirements for every course in which they are enrolled. Attendance regulations are determined by the faculty of each department based upon their academic requirements for each curriculum and/or course. At the beginning of each semester, instructors of record will clearly state their attendance policy or participation policy in their course syllabi. Dismissal from a course may result from unexcused absenteeism or non-participation. A grade of "F" will be recorded for a student so notified unless the student makes a formal application for withdrawal from that course prior to the semester deadline for withdrawing without academic penalty, consistent with the college withdrawal policy. Course withdrawal requests are submitted in UCanWeb on the registration tab. Suspension from college may be imposed by the Provost/Vice President for Academic Affairs if absenteeism or non-participation has reached such proportions that further academic progress is not possible, with grades of "F" for courses not completed as of the suspension date.

ACADEMIC INTEGRITY POLICY

The State University of New York at Canton is dedicated to holding its academic community to the highest standards of academic integrity. We believe that in order for students to have successful careers in their chosen fields, they must master their own course work and not imitate or copy human or computer-generated content and claim it as their own. Academic integrity is essential to the success of the College's educational mission, and violations of this policy are considered a serious matter.

Students are therefore expected to comply with all academic integrity standards described in the SUNY Canton Code of Student Conduct, Rights, and Responsibilities which can be found in the Student Handbook. These standards include, but are not limited to, issues such as cheating and plagiarism. Breaches of our academic integrity standards will result in a variety of penalties depending on the severity of the problem.

Please see the Academic Integrity Policy at https://www.canton.edu/media/pdf/Academic_Integrity.pdf for additional information.

GRADING AND HONOR DEFINITIONS

A credit hour is defined as three hours work per week per semester in any combination of class, laboratory and outside study time.

PASSING GRADE

A, B+, B, C+, C, D+, D and P are passing grades. The grade considered satisfactory for completion of a course as a prerequisite for subsequent courses or activities will be determined by each department or program and stipulated in the course description.

GRADE POINT AVERAGE

The Grade Point Average is determined by dividing the total grade points earned by the total academic credit hours attempted (not including W's, I's, P's, or Equivalent

The Academic Program

Credits). NOTE: A GPA Calculator can be found at this link: <https://www.canton.edu/forms/student/>

Letter Grade	Grade Pts. per Credit Hr.
A	4.00—Excellent
B+	3.50—Very Good
B	3.00—Good
C+	2.50—Above Average
C	2.00—Average
D+	1.50—Below Average
D	1.00 Minimally Passing
F	0.00—Failing

HONORS LISTS

At the end of each semester, Honors Lists will be prepared by the Registrar's Office and sent to the Office of Public Relations for distribution to the news media. Media releases will not include the names of students who have restricted the release of directory information pursuant to FERPA.

President's Honors Lists will include the names of the full-time students who earn semester GPA's of 3.75 or higher. To be eligible, students must be enrolled in 12 or more credit hours. The President's Honors List includes students taking imputed or remedial-level courses and students taking pass/fail courses if fewer than 3-credit hours. When the pass/fail credit hours exceed 2-credit hours due to specific program requirements, a student can be named to the President's Honors List, as long as they have an additional minimum 10 hours of graded coursework.

Dean's Honors Lists will include the names of full-time students who earn semester GPA's of 3.25 - 3.74. To be eligible, students must be enrolled in 12 or more credit hours. The Dean's Honors List includes students taking imputed or remedial-level courses and students taking pass/fail courses if fewer than 3-credit hours. When the pass/fail credit hours exceed 2-credit hours due to specific program requirements, a student can be named to the Dean's Honors List, as long as they have an additional minimum 10 hours of graded coursework.

Part-Time Academic Honors Lists will include the names of part-time, matriculated students who earn semester GPA's of 3.25 or higher. To be eligible, students must complete 6 or more credit hours. The Part-Time Academic Honors List includes students taking imputed or remedial-level courses and students taking pass/fail courses if fewer than 3-credit hours. When the pass/fail credit hours exceed 2-credit hours due to specific program requirements, a student can be named to the Part-Time Honors List, as long as they have an additional minimum 4 hours of graded coursework.

Note: Unless required by the major, students who receive any incomplete grades at the completion of a semester are not included in the Dean's/President's/Part-Time honors lists. If a student is eligible for an honors list once the grade is changed, the appropriate honor will be notated on the student transcript. However, because the change will occur after the deadline, media releases will not include the names of students who are eligible for an honors list. When an Incomplete grade is a result of a requirement in the major (e.g., internship hours still to be completed), students with Incomplete grades can qualify as long as they have at least 12 completed credits and qualifying GPA.

Students who have earned cumulative grade point averages as listed below will be designated for Cum Laude, Magna Cum Laude, or Summa Cum Laude on their diplomas upon degree completion:

- Cum Laude ~ 3.250-3.499
- Magna Cum Laude ~ 3.500-3.749
- Summa Cum Laude ~ 3.750-4.000

PASS/FAIL POLICY

The Pass/Fail Policy is intended to better serve our students who want to take an elective course without risking a negative effect on their GPA. Earned grades of A-D will appear on the student's academic transcript as a "P" (Pass); earned grades of F will remain an "F" (Fail). The "P" (Pass) grade is not calculated in the GPA, but counts towards program pursuit for financial aid

purposes. It is understood that the Pass/Fail Policy is NOT designed to be used as a "lifeline" for students in jeopardy of doing poorly in courses.

1. Number of Courses Allowed to Choose Pass/Fail

- Maximum number of 4 courses at SUNY Canton for a Baccalaureate Degree
- Maximum number of 2 courses at SUNY Canton for an Associate's Degree
- NOTE: Courses in which students took a Pass Grade Option during COVID-related semesters (Spring 2020, Fall 2020, Spring 2021) are excluded from the maximum number of courses allowed above
- NOTE: Courses which are normally designated as Pass/Fail courses are excluded from the maximum number of courses allowed above
- Only one Pass/Fail Option per semester is allowed

2. Deadline to Request a Pass/Fail Option

- The deadline for students to request a Pass/Fail Option is 3 weeks from the date the course begins for full 15-week courses
- The deadline for students to request a Pass/Fail Option is 1 week from the date the course begins for any course which is NOT a regular, full 15-week course
- The deadline dates will be published on the Academic Calendar
- Once the request for a Pass/Fail Option is approved and processed by the Registrar, the student is not permitted to revert the grade back to the standard A-F grading scale

3. Courses Excluded from Pass/Fail Option

- Students may not request a Pass/Fail for any courses in their major, regardless of whether or not their program is accredited
- Students may not request a Pass/Fail for any courses in their minor

- Students may not request a Pass/Fail for any General Education Requirement (GER) courses
 - Students may not request a Pass/Fail for their First Year Experience (FYEP) course
 - Students may not request a Pass/Fail if they are repeating a course
4. Criteria for Requesting a Pass/Fail Option
- Students must have completed one full semester at SUNY Canton
 - Students must be in Good Standing and have a minimum 2.0 GPA in order to request a Pass/Fail

MIDTERM GRADES

1. At midterm, faculty members will submit student grades via UCanWeb (the online student Information system) for all courses they are teaching or supervising.
2. Faculty members will report midterm grades using the same letter grade designations used for final course grades.
3. All mid-term grades are available to students electronically through secure access to UCanWeb. Students receiving grades of D+, D, or F will have a flag raised in RooSuccess. Students should seek out their instructors/academic advisors to identify the problem, seek additional support services (tutoring labs), and make the necessary improvement.

STUDENT GRADES

The permanent record is the official academic record and is permanently filed in the Registrar's Office. Only personnel authorized by the Registrar may have direct access to permanent records. See Transcripts section for details on how to request grades be released to a third party.

Final and mid-term grades are available to students online through secure access to UCanWeb. Final grades may be withheld from any student who has a delinquent college obligation.

INCOMPLETE GRADES

An incomplete final grade may be assigned by a faculty member in cases when, for valid extenuating circumstances (illness, accident, etc.), all of the required work has not been completed but is otherwise satisfactory. (Unexcused absence from the final exam and/or failure to turn in a final project or paper are NOT extenuating circumstances). Except in unusual cases, the delinquent work should not exceed 10-20 percent of the total required work. An Incomplete Grade Contract must be completed in full, including all signatures, prior to receiving a grade of ("I") Incomplete.

Responsibility for making up incomplete work lies with the student. Incomplete work must be made up by the due date posted on the academic calendar subsequent regular term semester. Alternate arrangement (shorter or longer time frame) can be implemented if agreed upon by the instructor and student and approved by the Dean of the School. If the work is not completed according to the agreed upon plan, the incomplete grade will be recorded as "F" on the student's record. Access to the course content via the Learning Management System (Brightspace) is available as long as the course remains in Incomplete status, but is terminated once a final grade is assigned in the course.

WITHDRAWAL FROM COURSES

Following the course change period students may withdraw from credit courses without academic penalty (receiving a grade of "W") under the following conditions, unless dismissed for deviant academic conduct:

- In order to maintain the academic integrity of the institution, the academic focus of the students and adequate student academic progress toward a degree, a matriculated full-time student may not drop courses below a 12-credit hour load while a semester is in progress. In case of exceptional circumstances beyond the student's control and with

the written approval of the Dean of the School in which the student is enrolled, a student may drop below the limit to part-time status. Students are encouraged to consult with the Financial Aid Office in the One Hop Shop and the Residence Life Office to determine the impact of this academic decision before dropping to part-time status.

- Withdrawal from a course is requested via a Course Change Request available in UCan Web under the Registration tab. The request must be approved by the student's academic advisor and/or academic Dean. A \$20 fee will be added to the student's account and must be paid at the Student Accounts Office in the One Hop Shop or via the online payment portal which is available on the SUNY Canton webpage (Quick Links > Online Payment). The course withdrawal will not be official until all required permissions have been completed.
- Withdrawal is allowed under the above conditions prior to the last ten class days of the semester. In courses less than a semester in length, withdrawal is allowed prior to completion of 85 percent of the class meetings.
- A matriculated part-time student may not withdraw from any course unless exceptional circumstances exist and the above procedure is followed.
- Non-matriculated students are required to pay a \$20 course change fee. No permissions are required.
- Approvals of the advisor, and/or School Dean do not necessarily indicate approval of the action, but signify that counseling has occurred and the student is fully aware of the consequences of course withdrawal.
- Failure to attend class or merely giving notice to an instructor is not an official withdrawal.
- A grade of "W" (Withdrawn) will be recorded and will not be used in calculat-

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ing GPA. When all approvals have been completed, the official withdrawal will be confirmed by the student by returning to the Course Change Request Outcome Page in UCan Web and submitting requested changes.

Students who receive financial aid are reminded that their aid is based on the number of credit hours they maintain. A loss of aid may occur if a student drops below a certain credit hour level (e.g., from full-time to part-time). Students should consult with the Financial Aid Office - Student Service Center prior to any decision to withdraw from courses

LEAVE OF ABSENCE

Full-time, matriculated students facing circumstances that will interrupt their course of study at SUNY Canton, but wish to return to the College within one year, may apply for a Leave of Absence. A leave of absence preserves admitted status in the student's current degree program at the time leave begins. This means that the academic requirements that are in place when the student leaves are "frozen" and allows students to continue to claim their current catalog year. It also allows students to register without being readmitted and maintains access to SUNY Canton email during their time away.

A leave of absence is normally granted for a maximum of 2 consecutive semesters or the total period of active duty for those called to active military service. Students may return to the campus following the leave by contacting their Dean's Office to select classes. If the leave of absence expires, the student must apply for readmission, and meet any new admission or degree requirements that are in place upon return to the College. A Leave of Absence can be initiated by the student through UCanWeb, under the Miscellaneous Student Requirements tab. To be considered for a leave of absence, students MUST meet the following eligibility criteria:

- Be a full-time, matriculated student

- Have a SUNY Canton cumulative GPA of 2.0 or greater at the end of the student's last semester.
- One or more semesters must have been completed at SUNY Canton.
- Have good student conduct standing.

Note: Permission of the Program Director is required for students in select programs. Programs needing specific approval include:

- Nursing – AAS
- Dual Degree Nursing Program (DDNP)
- Veterinary Technology – BS
- Veterinary Science Technology – AAS
- Physical Therapist Assistant – AAS
- Practical Nursing

REPEATING COURSES

Students may repeat courses. If higher, the grade earned in the repeated course shall be substituted for the original grade in computing the GPA. Repeating courses may affect TAP awards. Students should consult the Financial Aid Office prior to registering to retake a course. Repeated courses must be taken at SUNY Canton for the course grade to be calculated in your SUNY Canton GPA. Repeated courses taken at another institution where a grade of C or better is earned, will be transferred back for credit only and the SUNY Canton grade will be excluded from the student's GPA; to clarify, the student will receive transfer credit, but the grade will not transfer.

TRANSCRIPTS

SUNY Canton's transcripts are processed through Parchment. Students will request their transcript(s) through their secure UCanWeb account. SUNY Canton will cover the cost of the actual transcript(s) from the \$5 transcript fee that students are charged each semester. Students can choose to have a paper or an electronic transcript sent. However, it is the student's responsibility to pay the handling fee associated with having their transcript(s) sent. The handling fee includes valuable notifications

that alert students of any potential problems that may prevent their transcript(s) from being sent. In addition, students will have the ability to track the delivery status of their transcript(s). Expedited shipping is also available for an additional fee.

FINAL EXAMINATION

There will be a final examination period at the end of each semester. This period must be used by the professor for a comprehensive final examination, the last unit test, or some other activity of academic merit.

COURSE AUDIT

With permission of the instructor, a person may audit any credit course offered by the College. A maximum of two courses may be audited in one semester, unless a waiver is obtained from the Provost. An individual may not audit the same course in two consecutive semesters. The Course Audit Form, which is available at https://www.canton.edu/media/pdf/Course_Audit.pdf, must be completed and returned to the Registrar's Office. Course audits require a registration fee of \$50 per course, but are free of charge for those 60 years of age and over. Individuals may not begin auditing a course until the registration process is completed as described on the course audit form. Once the individual has elected to audit a course, one cannot subsequently change the audit to credit. No credit is granted for audited courses. A grade of AU (audited course) will appear on the student transcript; this grade will not be calculated in the student's GPA. The course auditor will abide by the conditions agreed to by the instructor and auditor as stated on the course audit form. Auditors must adhere to the Student Code of Conduct as published on the college web site, in the Student Handbook and in each course syllabus. Permission to audit may be revoked for disruptive or inappropriate behavior. Campus student services (i.e. Academic Support Services, Counseling, etc.) are not available for course auditors.

WITHDRAWING FROM THE COLLEGE

Students wishing to withdraw from College must submit a Request to Withdraw this semester through UCanWeb. The student is responsible for responding to and understanding any information sent to them during the withdrawal process. Failure to respond constitutes understanding and acceptance of the consequences of withdrawing. The deadline to withdraw from courses is posted on the Academic Calendar.

Non-Matriculated Students must complete the Course Change Request available in UCanWeb and act on the request within the posted deadlines.

MEDICAL WITHDRAWAL

A college withdrawal form or letter signed by the student or legal guardian must be submitted to the Vice President for the Student Affairs/Deans of Students to initiate the process. No medical withdrawals will be considered after the last official day of the semester as designated on the College calendar. Extenuating circumstances beyond the student's control may warrant an extension beyond the end of the semester.

Students wishing to return to the College must meet with the Director of Health Services (medical) or Director of Counseling (mental health) and provide documentation from their health care provider regarding their sustainability to return and to determine if any additional accommodations, such as modified living arrangements or additional support services, are required. The academic transcript will reflect a grade of "W" to indicate a student has withdrawn. The Vice President for Student Affairs/Dean of Students will forward copies of the conditions of withdrawal to the College Registrar, School Dean's Office, Admissions, Counseling Center, and Health Services. Re-registration is not guaranteed. Each student must apply for re-admission.

ACADEMIC FORGIVENESS POLICY

The intent of this policy is to allow students who previously accrued a SUNY Canton academic record with a substantial number of grades below the 1.00 level of D to be "forgiven" for their earlier performance, if they meet certain criteria.

Academic Forgiveness in this context means that the student's previous college work shall be treated as if it had been transferred to SUNY Canton from another college: none of the grades received would be counted in the current GPA, but the student would receive credit for any courses in which he/she earned a D or above. All General Education requirements completed during prior attendance would continue to count as requirements met, but only courses with a D or higher grade would be included in credits earned toward the degree, at the discretion of the School Dean. Students wishing to apply for the privilege of Academic Forgiveness must meet the following criteria:

1. The student must not have taken any coursework at SUNY Canton for a minimum of two calendar years at the time of proposed readmission.
2. The student must complete the Academic Forgiveness Application Form at the time of application for readmission. The application will include a reflective summary of why he/she should be considered for the privilege.
3. The student will not have attempted more than two semesters of coursework at SUNY Canton prior to readmission if enrolled in an associate degree program, or more than four semesters of coursework if enrolled in a bachelor's degree program. Students must complete at least one half of their degree requirement credits at SUNY Canton after forgiveness is granted.
4. The student is not eligible to receive Academic Forgiveness until he/she has completed a full-time semester of at least 12 credit hours as a readmitted

student. In this probationary semester, the student must receive at least a C in every course and is not permitted to withdraw from any courses.

5. The student will be placed on academic recovery for this first semester after readmission.
6. Upon completion of the probationary semester, if all requirements for Academic Forgiveness have been met, the School Dean will notify the Registrar so that the student's academic record may be modified.
7. If approved for Academic Forgiveness, a notation to this effect will be made on the student's SUNY Canton transcript and a new cumulative GPA will be calculated for all work beginning with the semester of readmission. This new GPA will be printed on the official transcript and used for computing the student's academic standing, and for meeting the minimum GPA requirement for graduation. All previous SUNY Canton work will continue to be listed on the transcript with the original grades received.
8. Academic Forgiveness may be granted only once in a student's college career at SUNY Canton.
9. Academic Forgiveness does not override state and federal financial aid regulations and satisfactory academic progress standards. Also, repeating courses previously passed may not count toward full-time enrollment for financial aid purposes. Students should contact the Financial Aid Office in the One Hop Shop for information on their eligibility if considering applying for Academic Forgiveness.

Students applying for Academic Forgiveness must also apply for readmission. See page 11 for more details.

GENERAL EDUCATION REQUIREMENTS

The General Education Program at SUNY Canton is designed to provide

students, throughout their college years, with a broad set of coherent and focused educational experiences aimed at enabling them to acquire knowledge and skills that are useful and important for all persons, regardless of their jobs or professions. General Education goes beyond the acquisition of the skills necessary to be competent in a field of specialization. It involves the discovery, evaluation, and transmission of essential knowledge that prepares students to lead fulfilled lives and to assume roles as creative and contributing members of society.

In accordance with the SUNY Board of Trustees Policy on General Education, all entering freshmen must meet specific General Education requirements. Faculty and students will periodically be required to engage in assessment activities to ensure that the General Education learning outcomes are being met. At SUNY Canton, students enrolled in the Associate of Arts (AA) or Associate of Science (AS) degree must complete seven of the ten Knowledge and Skills Areas of General Education in order to transfer seamlessly to another SUNY college to earn a baccalaureate degree. These may be completed in separate courses, although some courses may satisfy more than one General Education Requirement. Nevertheless, in order to meet graduation requirements, students enrolled in a SUNY Canton baccalaureate degree program must complete 30 credit hours of general education which must include Mathematics (GER 4), Basic Communication (GER 1 & 2), Diversity, Equity, and Inclusion (GER 3), and Natural Sciences (GER5), as well as at least three credits each in at least five of the following academic areas – Natural Science, Social Science, US History & Civic Engagement, World History and Global Awareness, Humanities, the Arts and World Languages. (See individual baccalaureate degree requirements for exceptions to this mandate.) All students will fulfill competency outcomes in Critical Thinking and Information Literacy Management, which are infused

throughout the curricula. Courses meeting specific General Education knowledge and skill areas are so designated in the course description section of the academic catalog. Students should work carefully with their advisors to ensure they are fulfilling the SUNY General Education Requirements (GER) in order to transfer seamlessly to another SUNY college or to meet SUNY Canton baccalaureate graduation requirements.

SUNY GENERAL EDUCATION REQUIREMENTS

I. KNOWLEDGE AREAS (GER 1-11)

1. Communication (written)
2. Communication (oral)
3. Diversity: Equity, Inclusion and Social Justice
4. Mathematics and Quantitative Reasoning
5. Natural Sciences and Scientific Reasoning
6. Humanities
7. Social Sciences
8. The Arts
9. United States History and Civic Engagement
10. World History and Global Awareness
11. World Languages

II. COMPETENCIES

1. Civic Discourse
2. Critical Thinking
3. Information Literacy

GRADUATION REQUIREMENTS

GRADUATION DEGREES AND CERTIFICATES

The College is authorized to grant the Bachelor of Technology (B.Tech.), Bachelor of Science (BS), and the Bachelor of Business Administration (BBA) degree, each requiring a minimum of 120 credit hours. In addition, the

College grants four associate degrees, each requiring a minimum of 60 credit hours; the Associate in Applied Science (AAS), Associate in Science (AS), Associate in Arts (AA), and the Associate in Occupational Studies (AOS). Finally the Certificate degree, which requires a minimum of 30 credit hours.

The College reserves the right to make modifications to a prescribed curriculum. Students failing to graduate due to failure, deficiency of grade points or credit hours, may be granted the degree after successful completion of the work either at SUNY Canton or another accredited college within seven years of departure. These hours must have the prior approval of the School Dean or Department Chairperson. All courses transferred will be recorded as “T_” (with the grade earned at the previous college: e.g., TA, TB+, TB, TC+. etc.). **Note: The commencement program is created once a year for May commencement ceremonies. The list of graduates is based on students who completed degree requirements in the prior August, December, January, and those who anticipate completing requirements in May. Students may petition their academic Dean for permission to participate in the current year's commencement ceremony without meeting degree requirements by the May deadline. Outstanding credit requirements will be at the discretion of the Dean. Please be aware that students are not permitted to have their names published in the commencement program in the same major within the past two years.**

BACCALAUREATE DEGREES

1. A student must be matriculated in a SUNY Canton curriculum for a minimum of 30 semester credit hours of graded course work earning a minimum GPA of 2.00 for all such credit hours taken. 15 credits must be taken in the major, or acceptable cognates as determined by the department at SUNY Canton. Individual programs may have additional graduation requirements.

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2. The successful completion of the prescribed curriculum. Upper division courses must comprise 45 semester credit hours, 24 of which must be taken within the major.
3. The successful completion of a writing intensive course taught within the prescribed curriculum.
4. The earning of an overall GPA of 2.00 unless otherwise prescribed.
5. Payment of all financial obligations to the College are required before diplomas will be released, but the degree will be conferred upon completion of all degree requirements.
6. Liberal Arts & Sciences Requirements:
 - a. Bachelor of Technology (B. Tech.) This degree is intended to prepare students for careers in a variety of professions and serves both freshmen and transfers from the Associate in Applied Science degree programs. The course of study leading to this degree will be an organized curriculum leading to a minimum of 120 semester credit hours, 30 of which must be in the liberal arts. Upper division courses must comprise of 45 semester credit hours, 24 of which must be taken within the major.
 - b. Bachelor of Business Administration (B.B.A.) This degree is intended to prepare students for careers in a variety of professions and serves both freshmen and transfers from the Associate in Applied Science degree programs. The course of study leading to this degree will be an organized curriculum leading to a minimum of 120 semester credit hours, 30 of which must be in the liberal arts. Upper division courses must comprise of 45 semester credit hours, 24 of which must be taken within the major.
 - c. Bachelor of Science (B.S.) The course of study leading to this degree will be an organized curriculum leading to a minimum of 120 semester

credit hours, 60 of which must be in the liberal arts. Upper division courses must comprise of 45 semester credit hours, 24 of which must be taken within the major.

ASSOCIATE DEGREES

1. A student must be matriculated in a SUNY Canton curriculum for a minimum of 15 semester credit hours of graded course work, earning a minimum GPA of 2.00 for all such credit hours taken. 15 credits must be taken in the major, or acceptable cognates as determined by the department at SUNY Canton. Individual programs may have additional graduation requirements.
2. The successful completion of the prescribed curriculum.
3. The successful completion of a writing intensive course taught within the prescribed curriculum.
4. The earning of an overall GPA of 2.00 unless otherwise prescribed.
5. Payment of all financial obligations to the College are required before diplomas will be released, but the degree will be conferred upon completion of all degree requirements.
6. Students matriculated in a baccalaureate program for a minimum of fifteen semester credit hours of graded course-work, earning a minimum GPA of 2.00 for all such credit hours taken, may be granted an associate degree in a related curriculum, without matriculation in that curriculum, upon completion of all associate degree requirements and application to the School Dean for the associate degree program.
7. Liberal Arts & Sciences Requirements:
 - a. Associate in Applied Science - A.A.S. This degree, intended to be used primarily for occupationally oriented curricula, may at times be appropriate as a transfer degree to certain types of specialized baccalaureate programs such as Bachelor of Business Administration, Bachelor of Education, Bachelor of Engineering, or Bachelor of Engineering Technology. The course of study will be an organized curriculum with a minimum of 20 semester credit hours drawn from the liberal arts and sciences areas comprising of work distributed in the humanities, the natural sciences and mathematics, and the social sciences. The 20 semester credit hours will be distributed with balance among the three major areas. Not less than 30 semester credit hours will be concentrated in an area appropriate for employment at a sub-professional or middle management level in a recognized group of occupational fields.
 - b. Associate in Science - A.S. This degree may be used for certain occupationally oriented curricula but is primarily designed to serve science- or professionally-related programs which lead to transfer to a baccalaureate degree program. The course of study leading to this degree should be an organized curriculum composed of courses in the liberal arts and sciences. At least 30 semester credit hours will be offered in the humanities, the natural sciences and mathematics, and the social sciences. The exact balance within these 30 semester credit hours is not specific, but there must be a reasonable distribution of work in the three categories as well as appropriate depth in one.
 - c. Associate in Arts - A.A. This degree will be used primarily for transfer programs which lead to a baccalaureate degree program. The course of study leading to this degree will be an organized curriculum composed primarily of courses in the liberal arts and sciences. At a minimum, there will be 48 semester credit hours taken in the humanities, the natural

sciences and mathematics, and the social sciences. The exact balance within the 48 semester credit hours among these three major fields is not specified, but there must be a reasonable distribution of work among these three categories as well as depth in one.

d. Associate in Occupational Studies - A.O.S. The course of study leading to this degree should be an organized curriculum of post-secondary level education leading to occupational competence. The program requires two academic years (or a minimum of 60 semester credit hours) for completion and may consist solely of course work in the specialized area and related work thereto. General education may be optionally included but will not be considered to contribute toward program registration. Such programs should have a distinct identity of their own, independent of courses of study leading to the Associate in Applied Science degree.

CERTIFICATE PROGRAMS

1. A student must be matriculated in a SUNY Canton curriculum for a minimum of 12 semester credit hours of graded course work, earning a minimum grade point average of 1.75 for all such credit hours taken. Individual programs may have additional graduation requirements.
2. Successful completion of all required courses.
3. A minimum GPA of 1.75, unless otherwise specified in the section describing that Certificate in the catalog.
4. Payment of all financial obligations to the College are required before diplomas will be released, but the degree will be conferred upon completion of all degree requirements.

NOTE: Successful completion of a Certificate Program does not automatically

qualify a student for admission to a degree curriculum. In order to be admitted to a degree curriculum, the graduate of the Certificate Program must achieve a record that indicates a reasonable probability of success in the new curriculum and be recommended by the faculty.

MAJOR & MINOR DEGREE REQUIREMENTS AND CATALOG YEAR

Majors: Students are enrolled into a catalog year based on the date of admission to their declared program. Students may keep this initial catalog year for up to five years for Certificate/Associate's degree programs and up to seven years for Bachelor's degree programs. After which the catalog year may be reset to the current catalog year. Students who change programs or have a break in matriculation are re-admitted to the current catalog year. Students with a break in attendance are allowed to retain their initial catalog year in the program, as long as completion within the 5 year/7 year limit can be attained. If program requirements change while the student is enrolled, the student has the right to continue to claim the requirements for the year that they were last admitted to the program. Exceptions may be approved by the academic Dean.

Minors: Students will follow the published requirements in place at the time they declare the minor, which may be different from the catalog year used for the major. If minor requirements change while the student is enrolled, the student may choose to complete established requirements or change to the new requirements. Exceptions may be approved by the academic Dean

MICROCREDENTIALS

Microcredentials are a collection of courses or competencies that verify, validate, and attest that one or more

specific skills have been achieved through credit-bearing courses and/or non-credit activities. Microcredentials differ from traditional degrees and certificates in that they are offered in shorter or more flexible time spans and are more narrowly focused than a traditional associate's or bachelor's degree. Microcredentials may be offered within a discipline area or inter-disciplinarily. Students and outside community members who wish to obtain or to certify that they have completed a more focused study pertaining to a particular skill may obtain a micro-credential from SUNY Canton. For a current listing of available microcredentials and details on how to sign up, see <https://www.canton.edu/academics/micro/>.

GRADUATION WITH HONORS

Honors for the Commencement Program are based on cumulative GPA up through the last term completed prior to commencement.

Cum Laude	GPA not less than 3.25
Magna Cum Laude	GPA not less than 3.50
Summa Cum Laude	GPA not less than 3.75

Upon program completion, students who have earned cumulative GPA's as listed above will be designated for Cum Laude, Magna Cum Laude, or Summa Cum Laude on their diplomas and transcripts.

AWARDING TWO BACCALAUREATE DEGREES

In order to qualify for a second baccalaureate degree from SUNY Canton, a student must satisfactorily complete at least 30 semester credit hours beyond the first degree requirements and also meet the specific curriculum requirements of the second program. All of the subsequent work should be taken in an essentially different area of specialization.

A student who wishes to earn a second baccalaureate degree at SUNY Canton must have written approval of course require-

ments by the appropriate School Dean. When the required courses are completed, the School Dean will notify the Registrar that the student is to be certified for the additional degree. No student may be awarded two degrees within the same minimum time span.

AWARDING TWO ASSOCIATE DEGREES

No student may be awarded two associate degrees simultaneously within the same minimum time span. In order to qualify for a second associate degree from SUNY Canton, a student must satisfactorily complete at least 15 semester credit hours beyond the first degree's requirements and also meet the specific curriculum requirements of the second program, all of the subsequent work to be taken in an essentially different area of specialization.

A student who wishes to earn an additional associate degree at SUNY Canton must have written approval of course requirements by the appropriate School Dean. When the required courses are completed, the School Dean will notify the Registrar that the student is to be certified for the additional degree.

DOUBLE MAJOR POLICY - BACCALAUREATE DEGREES

Students who are pursuing undergraduate baccalaureate degrees may pursue double majors, which is defined as the awarding of one degree with more than one major. All program requirements for both majors must be completed satisfactorily and concurrently (i.e., a student cannot graduate from SUNY Canton and return later to complete coursework for a second major). The student will designate the "first major" and the "second major" (e.g., "first major" is Applied Psychology and "second major" is Forensic Criminology). The diploma can accommodate up to two majors; transcripts will state the completion of two majors (Applied Psychology and Forensic Criminology) and any additional credentials,

such as minors and/or micro-credentials.^{1,2}

Students pursuing a baccalaureate degree may designate a second major after completing 30 credits and before completing 90 credits in the first major with an unambiguous GPA of 2.000 or greater (no grades of incomplete or missing grades). The designation of a second major will be completed using the SUNY Canton Double Major Request form. Course of study must be approved by both programs. The first and second major Department Chair / Director will need to sign the form to verify all qualifying criteria has been met. The catalog year of the second major will be matched to the year of the first major (e.g., if the first major is catalog year 2021-2022, the second major will be backdated to catalog year 2021-2022). If the student wishes to update both to a new catalog year, they will add this request to the comment section of the form or submit an update catalog form.

In most cases, the student may find it necessary to complete more than the minimum 120 credits for graduation. Their second major must include at least 15 Upper Level credits of difference in the coursework (i.e., not overlap with primary major requirements or overlap with the requirements of a minor or concentration). Beyond the 15 credits not in common, all other courses may apply to both majors (e.g., a student double majoring in Forensic Criminology and Applied Psychology may "double count" statistics applying the credits toward both majors). The writing intensive course is a major requirement within each major; therefore, students with double majors will usually complete two writing intensive courses.

Academic departments that offer more than one major may choose to develop a policy to prohibit students from declaring multiple majors within their programs. Any such policy proposal must be submitted to Academic Standards for review and approval.

¹Students should be fully aware of any financial aid implications before designat-

ing a primary major. Students may need to declare the second major as primary major for periods of time to ensure financial aid continues to apply. Students should be aware that pursuing more than one major may require additional time to graduation and additional costs.

²Students wishing to complete a dual degree (awarding of two baccalaureate degrees) must follow the SUNY Canton approved policy.

COMMENCEMENT

The commencement program is created once a year for May commencement ceremonies. The list of graduates is based on students who completed degree requirements in the prior August, December, January, and those who anticipate completing requirements in May. Students planning to attend and participate in the commencement ceremony will need to RSVP to Commencement in UCanWeb. All students, regardless of attendance at commencement, are encouraged to Apply to Graduate in UCanWeb to confirm preferred name and forwarding address.

Students who wish to participate in the Commencement ceremony prior to completion of all degree requirements may petition their academic Dean for permission to participate. To be considered, students must be within 12 credits of completion and be enrolled in all remaining credits in the Summer term. The decision to allow participation will be at the discretion of the Dean. Please be aware that students are not permitted to have their names published in the commencement program in the same major within the past two years.

ACADEMIC INFORMATION

STUDENT CLASSIFICATION

FULL-TIME STUDENT: one who is enrolled for 12 or more semester hours of credit.

PART-TIME STUDENT: one who is

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enrolled for less than 12 semester hours of credit.

MATRICULATED STUDENT: a student who has made formal application to and has been admitted into the College as a degree or certificate seeking candidate.

NON-MATRICULATED STUDENT: a student who has not made application for nor has been admitted into the College as a degree or certificate seeking candidate.

FRESHMAN: a student who has earned 0–29 credit hours, all of which must be a part of a degree program offered by the College.

SOPHOMORE: a student who has earned 30–59 credit hours, all of which must be a part of a degree program offered by the College.

JUNIOR: a student who has earned 60–89 credit hours, all of which must be a part of a degree program offered by the College.

SENIOR: a student who has earned 90+ credit hours, all of which must be a part of a degree program offered by the College.

ACADEMIC REQUIREMENTS— RE-REGISTRATION

To register for the second or any subsequent semester, a full-time matriculated, degree student must achieve the following standards (see chart below) or have the approval of the Dean of the School in which the *student* is registered.

STATUS	ATTEMPTED CREDITS/REQUIRED GPA					
	1-23	24-35	36-47	48-59	60-71	72+
Good Standing	1.5	1.75	2.0	2.0	2.0	2.0
Academic Jeopardy/ Warning	1.25 - 1.49	1.5 - 1.74	1.75 - 1.99			
Academic Recovery	0.5 - 1.24	0.75 - 1.49	1.50 - 1.74	1.50 - 1.99	1.65 - 1.99	1.75 - 1.99
Suspension	0.0 - 0.49	0.0 - 0.74	0.0 - 1.29	0.0 - 1.49	0.0 - 1.64	0.0 - 1.74

** Imputed credit ~ Courses designated as remedial/developmental cannot be awarded academic credit, and therefore do not count towards overall GPA or earned hours towards a college degree. However imputed credits are included when determining a student's academic status for their first semester only.*

** Students in academic jeopardy/warning are considered to be maintaining minimum satisfactory academic progress and are eligible to re-register.*

** Students on Academic Recovery have failed to achieve the minimum GPA but are allowed to re-register if they comply with the conditions specified in the Academic Recovery Contract. This program offers an opportunity for students to im-prove their academic standing.*

Any student who is suspended from College for academic reasons will have two options: 1) Submit an academic appeal and detailed plan for success by the stated deadline, or 2) complete a minimum of six credit hours and achieve a GPA of 2.0 or higher. Students are permitted to take these credits at SUNY Canton as a non-degree student or this coursework may be taken at another institution. Financial aid is not available for SUNY Canton non-degree students. Students may then apply

for readmission to SUNY Canton after one semester has passed via the Readmission Request Form in UCan Web. Permission to re-register is not guaranteed and will be granted only after approval by the appropriate School Dean.

A student suspended for multiple violations of the Academic Integrity Policy will also be required to complete a minimum of six credit hours and achieve a GPA of 2.0 or higher. Students are permitted to take these credits at SUNY Canton as a non-degree student or this coursework may be taken at another institution. Financial aid and campus housing are not available for SUNY Canton non-degree students. Students may then apply for readmission to SUNY Canton after one semester has passed via the Readmission Request Form in UCan Web. Permission to re-register is not guaranteed and will be granted only after approval by the appropriate School Dean.

Academic Recovery is a privilege and not a right. Students placed on academic recovery who fail to meet all requirements of the

program may be immediately suspended. A student suspended mid-semester for violating Academic Recovery may appeal ONLY if there are documented extenuating circumstances by emailing the Provost at provostoffice@canton.edu. The decision of the Provost is final.

Students suspended or expelled from the college for disciplinary reasons will receive grades earned for all courses completed. Students who voluntarily withdraw from College will be permitted to re-register with the concurrent written approval of the Director of Admissions and the School Dean of the requested curriculum. Students who are suspended or expelled from SUNY Canton or any other college/university for behavioral matters are required to meet with the Admissions Review Board before a decision of admission will be made.

Online Learning

TAKING AN ONLINE COURSE

In an online course, students connect with their teacher and classmates via the computer using the Internet. Course materials, tests, assignments, and discussions are delivered via the college's learning platform called Brightspace. Students can chat with their instructor virtually, collaborate with other students, and participate in classroom discussions in their online courses. Online courses provide students with the flexibility and convenience of studying anytime, anywhere in an interactive and innovative learning environment.

COURSE EXPECTATIONS

SUNY Canton's online courses provide the same quality experience as our traditional campus-based courses and have the same credits and requirements as face-to-face courses. All of SUNY Canton's online courses and academic programs are designed to produce the same learning outcomes as traditional courses.

The majority of online classes are not self-paced and active online participation is often mandatory. Additionally, many online courses have extensive reading and writing demands.

REQUIREMENTS

Students in online courses are required to be responsible for their learning. Strong time-management skills and study habits are essential in this learner-centered environment.

To participate in an online course, students need to have access to a working computer and connection to the Internet. Broadband connection is preferred. Students should check the course syllabus for broadband requirements before registering for a course. Additional technical requirements include:

- Microsoft Windows or Apple Mac OS



- The latest browser available (Firefox, Chrome, Microsoft Edge, or Safari)
- Internet Explorer is not compatible

LEARNER SUPPORT

SUNY Canton is dedicated to helping students achieve their educational goals by supporting and promoting initiatives that enhance student accessibility and academic excellence in online learning environments.

SUNY Canton offers live and recorded orientation, Q&A sessions, and a self-paced course on Brightspace basics to help students new to Brightspace, our learning management system, navigate their online courses.

SUNY Canton online students have access to the same advisement, registration, financial aid, library, academic and support services as on-campus students. Our library provides online tutorials on Internet research and links to databases and electronic journals. Tutoring Services and Student Accessibility Services offer tutoring, academic assistance, and various resources and materials online. Learner resources and support services are available online through the www.canton.edu website.

On a technical level, SUNY Canton's Information Services offers on-going technical support to students during normal institutional working hours for hardware, software, and course management issues through their Help Desk at helpdesk@canton.edu. Additional technical support is provided through the SUNY Online Help Desk at 1-844-673-6786. UCanWeb provides access to various student services such as financial aid, registration, course schedules, grades, and unofficial transcripts.

ACCREDITATION

SUNY Canton is approved to offer distance learning through the Middle States Commission on Higher Education (MSCHE). Some programs are SUNY and SED approved to be offered online. See individual academic programs for more information.

Academic Support Services

SUNY Canton offers robust academic support services to students. These services are designed to support and enhance the educational opportunities and experiences for all students at SUNY Canton. For complete descriptions and current contact information, you can visit Academic support services online. http://www.canton.edu/academic_support_services

PLACEMENT TESTING

SUNY Canton requires new matriculated students to take the Accuplacer placement exam unless exempt as determined by standardized test scores, such as Regents exams, ACT or SAT tests. Transfer students must demonstrate a “C” or better in a college-level English course to be exempt.

Students required to complete a placement test will be notified via their SUNY Canton email address and receive a notification on their new student checklist via UCanWeb. SUNY Canton provides all placement exams virtually. Student may request a test voucher or practice test items online, <http://www.canton.edu/testing>, or contact the Advising Center at (315) 379-3954

DEVELOPMENTAL STUDIES

Developmental education courses provide students with the opportunity to build competencies in reading, writing and mathematics that are essential to college success. Placement in these courses is based on test results, admissions referral and/or faculty referral. Faculty for those courses work closely with students and their curriculum advisors to encourage growth in academic skills and the exploration of personal and vocational goals.

ADVISING AND FIRST-YEAR PROGRAMS

Advising and First-Year Programs is part of the Ready Center in Miller Campus Center 224. The office supports students adjustment to college level learning and responsibility. The office can assist with:

- Advising new students and providing them with an understanding of degree requirements and scheduling.
- Coordinate the First Year Experience (FYEP 101) class and experience
- Provide information on academic rules and resources
- Provide degree worksheets, advice on degree completion and assistance navigating DegreeWorks
- Assist students considering a change in major to understand their unique situation
- Assist students in preparing to meet with their faculty advisors and plan a schedule
- Referrals to appropriate faculty advisors, dean's offices or other campus resources.
- Work with Academic Recovery students to help them return to good academic standing
- Administer the Accuplacer placement exam.
- Coordinate outreach on flags raised by instructors in RooSuccess

Additional information and office contacts can be found online at <http://www.canton.edu/advising>.

COLLEGIATE SCIENCE & TECHNOLOGY PROGRAM

SUNY Canton's Collegiate Science & Technology Entry Program (CSTEP) is a scholars program designed to prepare minority and economically disadvantaged students for careers in scientific, technical, engineering, mathematical, health-related and licensed professions. The program, which is part of a statewide effort to address

the issue of minority under-representation in the STEM and Licensed professions, emphasizes academic preparation and achievement, and career awareness. CSTEP provides students with a unique college experience that combines academic services and activities with a variety of networking and career-advancement opportunities. Participants share invaluable social interaction and congenial support with fellow students, as well as receive customized strategies for success in both professional and personal aspects of life. Space is limited so students are encouraged to apply early. The CSTEP Office is located in Nevaldine Hall South 131.

EDUCATIONAL OPPORTUNITY PROGRAM

The Educational Opportunity Program (EOP) is committed to the recruitment, retention and graduation of students who normally would not be afforded the chance to pursue a college education. Students are admitted who meet specific academic and financial criteria and who demonstrate the potential for post-secondary success. All new EOP students are required to participate in an extended EOP orientation/summer programs in August. In addition to the regular campus orientation required of all Incoming students, EOP provides academic support services, personal counseling, tutoring and financial assistance. Space is limited so students are encouraged to complete their academic and financial applications early.

TRiO STUDENT SUPPORT SERVICES PROGRAM

The TRiO Student Support Services (SSS) program is federally funded and provides enhanced academic assistance to eligible students. Eligibility is based on

established academic and financial criteria. The goal of the program is to help students successfully complete their post-secondary education and encourage them to pursue a baccalaureate degree. SSS provides a variety of support services to about 200 students each year, including study skills, time management, academic and transfer counseling and tutorial assistance in math, and science. Students are required to complete mandatory financial literacy modules. Newly admitted TRiO students may also have the opportunity to participate in a summer program. Please contact the director at 315-386-7406 with any questions.

LEARNING COMMONS

The Learning Commons includes Southworth Library, Betty J. Evans Tutoring Center, and the Academic Recovery Program. Also located in the facility are the Information Services Help Desk and Cyber Café. The Learning Commons provides the College with access to resources, technology, and services that promote teaching and learning. The Learning Commons is a resource-rich hub for innovation, collaboration, and engagement. The Learning Commons features individual and group study spaces, silent zone study spaces, printers, and scanners. The building is equipped with wi-fi, and provides access to laptops, iPads, and other technology. The Café offers breakfast and lunch dine in or take out options and features Star Bucks coffee. The Learning Commons offers extended hours of operation including late-night and weekend hours as well as 24/7 access during final examinations. Services and resources are available virtually as well as on campus.

SOUTHWORTH LIBRARY

The Southworth Library provides information and services that support teaching and learning. The librarian faculty assist with scholarly inquiry and re-search. The library collection provides access to academic materials that support research,

learning, and teaching. Other services include:

- Reserve Textbook Collection featuring print and e-book textbooks that students can borrow as an alternative to purchasing required textbooks.
- An extensive book collection that features print and e-books for academic learning, teaching, and pleasure reading.
- Access to 24/7 reference and research support.
- Access to extensive research databases.
- Information literacy instruction that provides students with hands-on learning oriented on identifying information for academic learning and research.
- Circulation of academic materials, technology, and other academic-support items.
- Access to inter-library loan for items not available in this library.
- Borrowing privileges through the Associate Colleges of St. Lawrence County including SUNY Potsdam, Clarkson, and St. Lawrence University.

For additional information, contact us at library@canton.edu or (315)386-7228.

BETTY J. EVANS TUTORING CENTER

The Tutoring Center holds International Tutor Training Program Certification through the College Reading and Learning Association (CRLA) and is staffed professional and peer tutors, as well as faculty volunteers. The Tutoring Center provides students out-side-the-classroom learning opportunities by offering a variety of educational resources.

- Writing Center
- STEM Lab (Science, Technology, Engineering, and Math)
- Business & Accounting Lab
- Late-night and weekend tutoring

For additional information, contact us at tutoring@canton.edu or (315)386-7228.

ACADEMIC RECOVERY PROGRAM

The goal of the College is for every student to have a successful academic experience. If a student fails to achieve a minimum grade point average (GPA) or meet the required number of credits needed continue their academic students, they are offered a chance to improve through the Academic Recovery Program. This program is an alternative for students who are in jeopardy of suspension. The program provides a structured learning experience that provides students with a plan and resources for them to raise their cumulative GPA toward good academic standing. The program features components that include:

- Weekly academic mentoring and tutoring.
- Workshops designed to instill successful habits, i.e., time management, study skills, etc.
- Identification of individualized academic goals and planning for remediation based on those goals.

For additional information contact the office of Academic Recovery at academicrecovery@canton.edu or (315)386-7425.

STUDENT ACCESSIBILITY SERVICES

The Office of Student Accessibility Services is committed to and supports the mission of SUNY Canton in the inclusion of all students who can benefit from full and equal access to educational advancement and student life.

In accordance with Section 504 of the Rehabilitation Act of 1973, Section 508, the Americans with Disabilities Act of 1990, and the Americans with Disabilities Act Amendments of 2008, the college community endeavors to make reasonable adjustments in its policies, practices, services, and facilities to ensure equal access for students with disabilities. SUNY Canton will also strive to ensure

that an otherwise qualified individual with a disability will not, on the basis of that disability, be subjected to discrimination under academic programs, services and activities offered by the College.

The mission of the Office of Student Accessibility Services is to provide academic accommodations for all qualified students who have a learning disability, mental health disability, or a physical disability. It is the initial responsibility of the student to identify themselves as having a disability,

request accommodations, and submit complete and valid documentation of their diagnosis. The student must register with the Office of Student Accessibility Services in order to request and receive accommodations. Accommodations will be determined on an individual basis and based on the interactive process. The Office of Student Accessibility Services will coordinate, assist, and advocate for students requesting academic accommodations, non-academic auxiliary aids, or services with the appropriate academic or professional campus office.

Personal care needs are the responsibility of the student.

For additional information regarding Student Accessibility Services and our documentation guidelines, please call (315) 386-7392 or visit us at www.canton.edu/accessibility/.



The educational experience at SUNY Canton consists of both academic efforts in the classroom and developmental opportunities through programs offered by the Division of Student Affairs. Overall, the Division is concerned with the quality of life of each student and provides programs and services which . . .

- Promote student development by encouraging positive and realistic self-appraisal, intellectual development, physical fitness, the capacity to appreciate cultural and aesthetic differences, the capacity to work independently and interdependently, and to make appropriate personal and occupational choices;
- Assist students in overcoming personal, physical or educational problems;
- Identify environmental conditions that may negatively influence welfare of students and take steps to overcome such conditions.

The Student Affairs staff has a major responsibility for the quality of student life on the Canton campus. The staff works closely with students through the services available in the Counseling, Health Services, Intramural Sports, Diversity, University Police, Student Activities, Involvement, and Leadership (SAIL), and Residence Life Offices.

NEW STUDENT ORIENTATION PROGRAMS

The College recognizes the social and academic adjustments which must occur for entering college students to be successful. To enable new students to move with ease and confidence from the home/high school, SUNY Canton provides an orientation program as a total campus endeavor. All new students are expected to participate in orientation and it is mandatory for all new students who will be attending at least one course on campus. During orientation, students get a sense of the academic

expectations, meet faculty, staff and administrators, experience campus life and have a chance to meet other new students as well as student leaders.

COUNSELING CENTER

The Counseling Center supports the mission of SUNY Canton and the Division of Student Affairs by contributing to the improvement of both mind and character of our students. By responding to the personal and psychological needs of the student body, we strive to support their independence and emotional well-being, assisting them in negotiating the complexities of college and successfully preparing them to meet the challenges of the future.

The Counseling Center provides professional and confidential counseling services to assist students in achieving their personal and academic goals through consultation with organizations, faculty, staff and administrators. Collaboration with departments on and off campus contributes to accurate response, assessment, and/or referral.

The Counseling Center provides individual and group counseling, crisis intervention, outreach, educational presentations, and leadership training. The Center is dedicated to maintaining an open atmosphere on campus, honoring the numerous social and cultural contexts represented by our students.

The Counseling Center plays an integral role in promoting a safe and positive environment which values the unique contribution of all individuals and establishes a foundation conducive to learning and developing a healthy lifestyle.

RESIDENCE LIFE

RESIDENCE HALLS

At SUNY Canton, we consider on-campus living an important part of your education—in fact, it's an education in itself. Living in one of Canton's five residence halls means that your life here will

include far more than classroom and lab work... it means that SUNY Canton will be your home for 9 out of 12 months for the next few years.

Canton's five halls—Heritage, Mohawk, Rushton, Smith and Kennedy Hall—are located along the Grasse River near classroom buildings, the library Commons, the gym, other recreational facilities, and Chaney Dining Center. It is about a ten minute walk over the footbridge to downtown Canton. The residence halls provide you with a living environment that is clean, safe, and pleasant at an affordable price.

Rooms are attractively furnished with beds, desks, chairs, dressers, blinds, and large closets or armoires. Three rooms are clustered around an adjoining bath in Heritage, Rushton, Mohawk and Smith. In Kennedy Hall, each apartment has at least one full bath. While we provide the basics, you may desire to add a touch of home with such items as rugs, posters, desk lamps or plants.

SUNY Canton is proud to offer non-gendered inclusive housing. Kennedy Hall is open to all genders and features 303+ beds of suite-style housing. We are also happy to work with students living in the other residence halls to accommodate special requests related to gender identity and/or sexual orientation. If you would like more information or would like to discuss your living space just give us a call at 315-386-7513.

LIVE ON CAMPUS?

SUNY Canton provides students with a pleasant affordable residential experience that assists you in getting the most out of College. Have you thought about why you should live on campus? Here are some of the advantages:

CONVENIENT:

Living five minutes from your classes, computer lab, Learning Commons, gym, or fitness center can't be beat in the heart of winter. Having your food prepared for you, your parking lot plowed, your heat, electricity, cable paid for, and your friends just down the hall, all make your college experience more comfortable. No more getting up at 5:30 a.m. to clean the snow off your car so you can make the commute for your 8:00 a.m. class.

INTERNET ACCESS:

Recognizing the role that the Internet plays in the educational and social lives of college students all residence halls feature high-speed wireless internet.

IT'S WHERE THE ACTION IS:

When you talk to friends who have gone to college, they first think back to the fun they had in the Residence Halls. From the pizza parties, the intramural champion teams, the late night study groups, the floor trips and activities, to the lifelong friends that you will make, the residential experience is a must.

SAFE:

Your personal safety on campus is a priority for us. Our campus is well lit, patrolled and secure with electronic front door access systems, room combinations, and blue light system. This allows you to spend more time doing the things that are important to you, right here on campus. This means no driving home after a long day of classes and studying and affords you one of the best opportunities to pursue your education.

LIFE-STYLE OPTIONS

Numerous life-style options have been developed to assist you in finding just the right match for your "home-away-from-home." They are:

All-Female Floors – These floors will be reserved for female students only.

Non-Themed Housing – These rooms are in co-ed wings and do not have a centralized theme. These rooms are suited best for students who are not interested in living in theme housing, but are looking for a more traditional-styled college living experience.

Honors Floor – This floor is designed for those students who are interested in academic honors programs at SUNY Canton and excelled academically in high school.

Team Roo! – This is a special interest floor for those participating in college athletics, intramurals, or those who are simply athletically inclined or enjoy sports.

Esports – This is a special interest floor for those interested in gaming (such as video game systems like X-Box, Wii, PS3), board games and card and Esports.

Kennedy Hall – This newer, state-of-the-art residence hall that offers apartment-style housing opened in Fall 2011 for upperclassmen students only. Eligibility requirements include, but are not limited to: grade point average, class year, and disciplinary record.

The Pet Wing – This housing option is designed for students who enjoy sharing their living space with animals. It is not a requirement that a student possess an animal to live on this floor, however, students who have allergies to any kind of animal are strongly discouraged from living in this area due to the various animals that live on these floors. Residents are permitted to bring small, caged pets from home with the prior approval of the Residence Hall Director. We're sorry, but at this time we do not permit dogs (of any size), birds, spiders, or snakes in this living environment. You will be notified during the summer months if you are approved to live in this housing option. This wing is also designated as Alcohol Free.

The Dog Floor – This new housing option allows students to bring an approved dog

to live with them. More details will be forthcoming.

All rooms are attractively furnished, costing you less than the average apartment per month. They come with standard room furniture and Wi-Fi. For the room rate per semester, the price can't be beat. It is the policy of the State University of New York that all residence halls are smoke free. No smoking will be permitted in any residence hall.

MANDATORY HOUSING POLICY

Every student in full-time attendance at SUNY Canton, other than married students, single parents, students residing with parent or guardian, students 21 years of age or older, students taking only online classes who will be living 60+ miles from Canton and will not be participating in on-campus activities, such as athletics and Greek Life, and students living in college-approved Greek housing are required to live on-campus, or be released from that requirement by the Director of Residence Life. Any student who is officially enrolled in a bachelor's degree program and is in their junior or senior year with 60+ earned credit hours can be released. Due to the higher tuition rates paid by out-of-state and international students release requests not meeting the above criteria will be considered on a case-by-case basis for these students. All other cases will be reviewed on an individual basis, and a judgment will be made by the Director of Residence Life as to whether the severity of the hardship warrants a release. In addition, all students who live on-campus in college housing must contract one of the available meal plans with the College Association.

How Do I Sign Up?

To apply for a residence hall room, all you need to do is return the housing application with your life-style and roommate preferences and the appropriate deposit.

You can also apply online through your UCanWeb account. If you have any questions or need a housing application, feel free to call us at (315) 386-7513, e-mail us at reslife@canton.edu, or visit us at: www.canton.edu.

INFORMATION SERVICES

Information Services are available to every student attending the College. PC opportunities are located around the campus, providing all students with the opportunity for virtually unlimited use of PCs. All public PC labs use Microsoft Windows-based PCs connected to printers and the internet via the campus Local Area Network (LAN).

SUNY Canton participates in the Microsoft Campus Licensing Agreement. All students have access to standard software packages as listed on our website, www.canton.edu/it/. Many additional software listings are also available and can be found on the same site. Additional assistance for faculty, staff and students is available at the Help Desk. Each student receives an e-mail account.

The campus strongly supports distance learning opportunities for students. Many instructors make use of Internet-based instructional materials and testing, and some courses are taught entirely online.

HEALTH SERVICES

The SUNY Canton Davis Health Center strives to provide exemplary health care to its students during the entirety of their enrollment. As a team of health care professionals, the Davis Health Center is dedicated to providing culturally competent medical care, educational programs and student advocacy which will enhance a student's wellbeing and empower a student to become a well-informed consumer of health care throughout their lifetime. The Davis Health Center is staffed by a physician, physician assistants, nurse practitioners, nurses, a wellness program

coordinator, and support staff. The Health Center promotes healthy lifestyle choices as well as provides acute care for students with illnesses and injuries. The health center offers select in-house laboratory tests free of charge, along with send out laboratory tests collected by in-house phlebotomy services. In addition, there are laboratory and x-ray facilities available in Canton as well as the hospitals in Potsdam and Ogdensburg. Referrals and consultations with local medical specialists are available when necessary.

All students enrolled in six or more credit hours must complete the SUNY Canton Health History and Immunization Form. The SUNY Canton Health History and Immunization Form can be found and completed online through the student patient portal at: https://www.canton.edu/health_center/

The completed form should be submitted to the Davis Health Center 30 days prior to the first day of classes. The physical exam is optional except for students who are:

1. International students
2. Enrolled in Nursing, Physical Therapist Assistant, and Early Childhood Education Programs.

Please note these programs have additional health requirements, so please review the form carefully.

Note for athletes: All students who anticipate trying out for intercollegiate athletic teams need to complete only one health/immunization/physical form which is the Athletic Pre-Participation Physical Exam Form. The form can be found and completed online through the student patient portal at: https://www.canton.edu/health_center/. Athletes will not be allowed to try out or practice with a team until the Athletic Pre-Participation Physical Exam Form is completed.

IMMUNIZATIONS

New York State Public Health Law 2165 requires students attending colleges and universities to demonstrate proof of

immunization against measles, mumps and rubella (MMR). All students who are registered six or more credit hours will be required to show written proof of MMR immunity to the Davis Health Center prior to the first day of classes. Exemptions to this requirement are:

- Students born before January 1, 1957;
- Students who hold genuine and sincere religious beliefs which are contrary to immunizations (documentation required);
- Students for whom immunization is medically contraindicated (documentation required);
- Students taking all classes online and not living on campus;
- Students who are part-time taking less than six credit hours.

New York State Public Health Law (NYSPL) 2167 requires institutions, including colleges and universities, to distribute information about meningococcal disease and vaccination to all students attending college six or more credit hours. The law also requires that these students, whether they live on or off campus, acknowledge in writing that they have either:

- A record of meningococcal meningitis immunization within five years of admission; OR
- An acknowledgement of meningococcal disease risks and refusal of meningococcal meningitis immunization signed by the student or student's parent or guardian if under age 18.

Failure to comply with either of these mandatory health requirements within 30 days from the start of classes will result in suspension from the College.

INSURANCE

The College does not insure students against medical expenses which may result from an illness or accident while pursu-

ing their activities at the College. Full-time students are mandated to have medical insurance, either under a policy held by the student or parent/guardian, or through a health and accident policy available through the College. The insurance policy provided through the College provides medical coverage, including preventative services benefits such as screenings, exams and immunizations as specified by the Affordable Care Act (ACA).

An Insurance brochure outlining the insurance coverage is available online at: http://www.canton.edu/health_center/insurance.html. All international students are required to purchase SUNY Medical Insurance for International Students. Information about the International Student Insurance can be found online at: http://www.canton.edu/health_center/insurance.html

OFFICE OF DIVERSITY AFFAIRS

The Office of Diversity Affairs operates in unison with the college by providing students quality cross-cultural programs, needed services, and engaging leadership development opportunities.

OUR GOALS:

- Identify the needs of students from under-represented ethnic and social groups.
- Provide counsel for students from under-represented ethnic and social groups regarding personal, academic, and social concerns.
- Identify, promote, and provide educational cross-cultural awareness programs.
- Identify, promote, advise, and provide leadership programming for students from under-represented ethnic and social groups.
- Provide or refer students to receive appropriate advocacy.

The services and programs available through our office and through networked

referrals include:

- Programs/ Events/ Speakers
- Sensitivity Training
- Student Leadership Development
- Mediation between Individuals/ Groups
- Classroom Presentations
- Provide Resources Regarding Culturally Diverse Issues
- Personal Counseling
- Mentoring/ Tutoring/ Advising
- Advocacy

CAREER COACHING, EMPLOYMENT AND CONTINUING EDUCATION

The Career Services Office is a dynamic office that students should visit long before they get ready to graduate and look for a job. While the Office does help students prepare their job search documents and brings many employers right to the campus to interview students, the Office also provides coaching and resources to help make sure they are on an academic/career path that is right for them. We encourage first year students to make an appointment to build their college resume and identify career goals.

Stop in to the office or log on to <https://careers.canton.edu/>, and check out the many resources available to students on topics like

- Job opportunities
- Internships
- Professional etiquette
- Starting a business
- Cover letters and resumes
- And more!

EMPLOYMENT

The Career Services Office coordinates in-person and virtual career fairs. Even if students are not ready to look for a job, a Career Fair is an excellent opportunity

to talk to employers, get advice and make helpful connections.

Career Services can assist students in drafting resumes and cover letters, planning a job search and preparing for interviews. Students can even look for and apply to jobs listed specifically for SUNY Canton graduates on the Career Services recruiting website: Handshake.

Many employers come to campus to conduct on-site interviews. Below are a few of the companies for which SUNY Canton students have gone to work:

- Siemens Building Technologies
- BreconRidge
- New York State Police
- Day & Nite All Service
- LC Drives
- Novelis
- St. Lawrence Health System
- IBEW
- Champlain Valley Physicians Hospital

Recent graduates have taken jobs as far away as Florida and Texas.

CONTINUING EDUCATION

SUNY Canton has created a number of 1-, 2- and 4-year programs that allow you to continue your education. If, however, you decide to follow an educational path not offered at SUNY Canton, the Career Services Office can help you find a school that will meet your career goals. From personal advising to online resources, we can help you identify the school that will best be able to build on your SUNY Canton education. The Career Services Office can assist students researching options of graduate school and will help them prepare their application documents.

RECREATION AND ATHLETICS

SUNY Canton has a total of 15 NCAA Division III varsity teams, Including teams for men and women in golf, lacrosse, ice

hockey, soccer, cross country and basketball. The Kangaroos also sponsor women's volleyball, women's softball and men's baseball. SUNY Canton Athletics also has varsity cheerleading and esports.

SUNY Canton competes in the State University of New York Athletic Conference (SUNYAC). Teams play colleges throughout the northeast, including Pennsylvania, Connecticut, New Hampshire and Massachusetts.

Coaches work diligently to recruit top student-athletes to fill highly competitive spots on team rosters. If you hope to try out for a sport or would like more information, particularly regarding eligibility, we strongly encourage you to contact the appropriate coach or athletic department staff member. Contact and other information can be found on the official SUNY Canton athletic website (www.rooathletics.com).

THE ROOS HOUSE IS HOME

In July 2011, SUNY Canton opened its \$42 million athletic facility nicknamed Roos House. The building features a three-court field house, indoor baseball/softball practice capability with year-round drop-down batting cages, new 5,000 sq. ft. fitness center, lap pool, ice rink, indoor golf cages, state-of-the-art athletic training room, dedicated team locker rooms and a dedicated study area for student-athletes with wireless computer access.

Facilities also include a lighted synthetic turf field for soccer and lacrosse as well as baseball and softball fields. Golf teams play at nearby Partridge Run Golf Course while the esports team enjoys our newly constructed Esports Arena, which is among the finest esports facilities in the northeast.

SUNY Canton also offers a wide variety of intramural and free recreation programs. Whether you're looking for individual activities like a jog around the beautiful, on-campus cross-country trail, a workout at the Fitness Center, or a Zumba or aerobics class, there is something for you.

FITNESS CENTER

The SUNY Canton Fitness Center is open to all students seven days a week. It features all Precor equipment including circuit weight machines, free weights and racks, and a variety of state-of-the-art cardiovascular machines including treadmills, elliptical machines, steppers and bikes. Most cardiovascular machines have television viewing capabilities.

INTRAMURALS

If you're looking for more of a competitive, structured recreational activity, the Intramural Department offers leagues in flag football, basketball, dodgeball, softball, volleyball, floor hockey, indoor soccer, badminton, and a variety of other weekend tournaments and activities. Programs are subject to change throughout any given year.

CLUBS / ORGANIZATIONS AND ACTIVITIES

The Richard W. Miller Campus Center, opened in 2002, replaced the Kingston Theatre, which was damaged by fire in 1997. Named for longtime professor and philanthropist Richard W. Miller, the center serves as the heart of campus, housing a variety of student services and amenities. The Office of Student Activities, Involvement, and Leadership (SAIL), located in the Campus Center, promotes student engagement through social, cultural, educational, and recreational activities. These activities are designed to enrich life outside the classroom, support personal growth and development, and encourage the wise use of leisure time.

Students can get involved on campus through a wide variety of clubs, organizations, and activities sponsored by the Student Government Association (SGA). With around 40 active groups representing academic, professional, and cultural interests, there's something for everyone. All clubs are open to SUNY Canton students—whether online, commuter, or residential.

Many of these organizations also contribute to campus leadership and student government. Students also help design and produce the Paysonian yearbook.

Below is a sample of the clubs and organizations:

- Automotive Club
- Axios at Canton
- Black Student Union
- College Activities Board
- Gaming Club
- Greek Council
- Harmony (The Music Club)
- National Society of Leadership and Success (Honor Society)
- Outdoor Adventure Club
- Pre-Veterinarian Club
- Robotics
- Spectrum
- SUNY Canton Veterinary Technician Association
- Society of Women Engineers

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association (SGA) is the governance voice of the students and provides a means of cooperation and unity among the students, faculty, staff and administration.

SGA is divided into three branches, the executive, legislative and judicial. The executive power is vested in a president, vice president, budget director, secretary, online student representative, and CAB president. The Senate, the legislative branch, is made up of student representatives from each club/organization or appointed by the SGA President. The Judicial Board is responsible for interpreting the constitution and for hearing cases in accordance with the Code of Student Conduct.

COLLEGE ACTIVITIES BOARD

The College Activities Board (CAB) is the major entertainment and activities group for the campus, and all enrolled students (including online students) are invited to participate in CAB activities. CAB is responsible for special week-ends, recreational tournaments, concerts, cultural, educational and social programs, and special events.

STUDENT JUDICIAL AFFAIRS

Most students find it relatively easy to adjust to the privileges and responsibilities of campus citizenship. For those students who find this process more difficult, the College provides such counsel as the student needs to gain insight and confidence in adjusting to college life. In some cases, when a student is unable or unwilling to assume his or her social responsibilities, it becomes necessary to impose disciplinary action.

The Code of Student Conduct is published yearly in the Canton *Student Handbook*, which can be viewed online at www.canton.edu/student_affairs/pdf/handbook.pdf. It is the obligation of all students to familiarize themselves with the regulations printed in the handbook.

UNIVERSITY POLICE DEPARTMENT

The SUNY Canton University Police Department is the law enforcement agency for the campus. The goal of the Department is to work with the campus community in an effort to create a safe environment. Keeping in mind the specialized needs of a college campus, the University Police take an active role in the educational process; its educational, informational and awareness programs strive to enlist the assistance and cooperation of all members of the academic community in the promotion of

practical and responsible community safety. The Department takes pride in its service-oriented approach which reflects a high degree of sensitivity toward the campus environment, student issues and campus community concerns.

The University Police Department is open 24 hours, seven days a week and can be reached by dialing 7777 from any campus phone or (315) 386-7777 from a non-campus phone. Among the services provided are:

- Motor Vehicle Accident Investigation, VTL Corrections Forms completion, firearms registration and storage;
- Loan of motorist aids such as jumper cables, gas, booster pack and performing vehicle unlocks;
- A Crime Prevention Office providing free bicycle registration and personal property registration using Operation Identification;
- The campus lost and found department.
- Safety Escorts on campus.

Students are permitted to have motor vehicles on-campus, provided all such motor vehicles are registered with the University Police Department, and the vehicle registration fee has been paid. Motor vehicle registration can be accomplished in UCanWeb survey and at the One Hop Shop. Students are required to abide by all parking regulations. A copy of the regulations can be found at www.canton.edu/university.police/parking.html.

Temporary Parking Permits may be obtained at the University Police Department.

JEANNE CLERY DISCLOSURE OF CAMPUS SECURITY POLICY AND CAMPUS STATISTICS ACT

SUNY Canton crime statistics filed with the United States Department of Education can be located at http://www.canton.edu/clery_act. You can obtain a copy of these statistics by contacting the University Police

Department at 315-386-7777. The United States Department of Education website is: <http://ope.ed.gov/security/index.asp>.

THE COLLEGE ASSOCIATION

The College Association, Inc. (CA) is a not-for-profit educational corporation that supports student success, the campus community, and educational mission of SUNY Canton through a diverse set of auxiliary functions. Core services that are currently provided include campus dining programs, retail operations, express mart / convenience store, spirit shop, catering, vending, laundry services, eCampus textbooks, campus IDs, flexible spending (Roo Express), as well as student government accounting and banking services. CA also handles additional contractual services in support of the college.

The College Association's activities and business services are conducted with oversight by a Board of Directors consisting of faculty, administrators, and students. The Board of Directors approves policies, provides oversight to management activities, and maintains fiduciary duties. The corporation operates in accordance with SUNY guidelines, and with campus policies, procedures, and expectations.

CAMPUS MINISTRY OFFICE

The Campus Ministry Office, staffed by local volunteer clergy, strives to minister to the campus community (students, faculty, administration and staff) by creating a physical, personal and spiritual presence within a caring environment. It stimulates and fosters spiritual development and growth by tending to the emotional, physical and intellectual well being of each person within the campus community. The office provides opportunities for worship, outreach, mentoring and spiritual guidance in collaboration with other campus committees.

- Interfaith prayer services
- Connects with the local churches, temples, mosques and synagogues
- Advisors for faith-based student clubs
- Service projects (i.e., community service, Fall “Make a Difference Day,” Spring “Clean-Up, Fix-Up Day” and Blessing of the Brains)
- Confidential spiritual guidance
- Educational programs
- Recreational and social events
- Provide resource contacts and/or assistance for those with critical needs.

The CARES (Character, Acts of Kindness, Respect, Environment and Spirituality) Committee, composed of members of the campus community, serves as both an advisory board to the Campus Ministry Office and assists with programming.

CHURCHES

Canton students are welcomed to services at the many churches in the area. In Canton, there are various Christian churches of both Roman Catholic and Protestant denominations. In the nearby vicinity, there are Jewish synagogues and a mosque. For a list of individual denominations/churches, please see the Campus Ministry webpage, www.canton.edu/campus_ministry/.

STUDENTS UNABLE BECAUSE OF RELIGIOUS BELIEFS TO ATTEND CLASSES ON CERTAIN DAYS

*(As required by Section 224-A
New York Education Law)*

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he is unable, because of his religious beliefs, to attend classes or to

participate in any examination, study or work requirements on a particular day or days.

2. Any student in an institution of higher education who is unable, because of his religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements.
3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.
4. If classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements held on other days.
5. In effectuating the provision of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section.
6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of

the county in which such institution of higher education is located for the enforcement of his rights under this section.

7. As used in this section, the term “institution of higher education” shall mean schools under the control of the board of trustees of the State University of New York or of the Board of Higher Education of the City of New York or any community college.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

The Family Educational Rights and Privacy Act (commonly known as FERPA) permits current or former students to inspect and review their educational records. Students wishing to review their records should complete the request form available in the Registrar's Office identifying the record(s) they want to inspect. The Registrar will make arrangements for access within 45 days of the request and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Registrar, the student will be advised to whom the request should be addressed.

Students are also accorded a right to challenge the contents of their educational records to insure that the records are not inaccurate, misleading or in violation of rights to privacy or other rights. In order to request the College to amend a record that he or she believes is inaccurate or misleading, a student should complete the request form available in the Registrar's Office, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures

will be provided to the student when notified of the right to a hearing.

FERPA also provides the right to withhold the release of personal information except as provided by law and College policy. SUNY Canton may disclose those items designated as directory information from a student's education record unless directed otherwise by the student in writing. SUNY Canton has designated directory information to include: student's full name, local address and telephone number, campus e-mail address, home address and home telephone number, date of birth, major field of study, dates of attendance, degrees and awards received, date(s) of graduation, participation in officially recognized sports and activities, and the most recent previous educational institution attended.

Students have the right to restrict the disclosure of the items designated as directory information. If students exercise this right, such information will not be released without their written consent except as provided by law and College policy. Non-directory information such as grades, GPA and Student ID number are not released for any student, except directly to the student, without express written consent. Students wishing to restrict the release of the items identified as directory information must notify the Office of the Registrar in writing by the first Friday of the academic term in which the information is not to be disclosed. The Confidentiality request form can be found at <https://www.canton.edu/registrar/ferpa.html>. Such restriction will remain in effect unless rescinded in writing by the student. Students should be aware that restricting the release of directory information will prevent the College from providing enrollment and graduation information to prospective employers, insurance companies, and lenders without written authorization. It will also prevent inclusion in any news releases of the Dean's List or other honors, as well as graduation lists for publication.

A student may choose to waive their

FERPA rights and allow academic information to be shared with persons of their choice by assigning a proxy(ies) in UCanWeb. This allows SUNY Canton to share academic information from the student's educational records with the person(s) the student assigns as a proxy. The proxy must provide the student's SUNY Canton ID and the correct password. This access is available through UCanWeb under the miscellaneous Student Requirements tab.

An exception permitting disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit and personal health staff); a person or company with whom the College has contracted (such as an attorney, auditor, or college agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Inquiries or complaints may be filed with the Family Educational Rights and Privacy Act Office, Department of Health, Education and Welfare, 400 Maryland Avenue, S.W., Washington, D.C. 20202-4605.

Copies of the Family Educational Rights and Privacy Act are available at the Office of Student Affairs, Miller Campus Center 229, and the Office of the Registrar, Miller Campus Center 012.

Program Offerings

Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

BACHELOR DEGREES				ASSOCIATE DEGREES			
	PAGE	SUNY Code	HEGIS Code		PAGE	SUNY Code	HEGIS Code
Applied Psychology, <i>BS</i>	63	1965	2099	Apprentice Training: Industrial Trades, <i>AAS</i>	92	0473	5301
Civil & Environmental Engineering Technology, <i>B. Tech</i>	64	2488	0925	Automotive Technology, <i>AOS</i>	93	0525	5306
Crime Analysis, <i>B.S.</i>	65	3006	2105	Business: Accounting, <i>AAS</i>	94	0630	5002
Criminal Investigation, <i>B. Tech</i>	66	1359	2105	Business Administration, <i>AAS, AS</i>	95	0632/0671	5004
Criminal Justice: Law Enforcement Leadership, <i>B. Tech</i>	67	1911	2105	Civil Engineering Technology, <i>AAS</i>	96	0517	5309
Cybersecurity, <i>B.S.</i>	68	2698	0701	Computer Information Systems, <i>AAS</i>	97	0581	5101
Data Science and Analytics, <i>B.S.</i>	69	3262	0703	Construction Technology: Management, <i>AAS</i>	98	1162	5317
Digital Communications and Storytelling, <i>BS</i>	70	2673	0699	Criminal Justice, <i>AAS</i>	99	0640	5505
Early Childhood Care & Management, <i>BBA</i>	71	2699	0506	Early Childhood, <i>AS</i>	100	1327	5503
Electrical Engineering Technology, <i>B. Tech</i>	72	0216	0925	Electrical Engineering Technology, <i>AAS</i>	101	0699	5310
Emergency Management, <i>BS</i>	73	1864	0599	Engineering Science, <i>AS</i>	102	0530	5609
Finance, <i>BBA</i>	74	0282	0504	General Technology, <i>AAS</i>	103	2208	5301
Forensic Criminology, <i>BS</i>	75	2994	2209	HVAC Engineering Technology, <i>AAS</i>	104	0444	5317
Funeral Services Administration, <i>B. Tech</i>	76	1525	1202	HVAC Trades, <i>AOS</i>	105	2953	5317
Game Design and Development, <i>BS</i>	77	2638	0799	Individual Studies, <i>AAS</i>	106	0688	5699
Graphic and Multimedia Design, <i>BS</i>	78	2026	0605	Liberal Arts and Sciences: General Studies, <i>AA, AS</i>	107	0250	5649
Health and Fitness Promotions, <i>B. Tech</i>	79	2254	1299.3	Mechanical Engineering Technology, <i>AAS</i>	108	0493	5315
Health Care Management, <i>BS</i>	80	0253	1202	Nursing, <i>AAS</i>	109	0622	5208.10
Homeland Security, <i>B. Tech</i>	81	2335	2105	Physical Therapist Assistant, <i>AAS</i>	110	0489	5219
Industrial Technology Management, <i>B. Tech</i>	82	1935	0935	Veterinary Science Technology, <i>AAS</i>	111	0521	5402
Information Technology, <i>B. Tech</i>	83	2045	0799				
Legal Studies, <i>BS</i>	84	0818	2199	CERTIFICATE PROGRAMS			
Management, <i>BBA</i>	85	1645	0506	Electrical Construction & Maintenance	112	0955	5317
Mechanical Engineering Technology, <i>B. Tech</i>	86	0235	0925	Practical Nursing	113	0938	5209.20
Nursing, <i>BS</i>	87	0291	1203.10				
Nursing Dual Degree, <i>AAS/BS</i>	88	2373	1203.00	OTHER PROGRAMS			
Sports Management, <i>BBA</i>	89	0182	0599	Environmental Science & Forestry, 2+2	114	0250/various	
Veterinary Service Administration, <i>BBA</i>	90	2535	1202	Forest Technology, 1+1	114	0620/1086	
Veterinary Technology, <i>BS</i>	91	2278	1299	SUNY Canton Corrections Academy	115		
				UB School of Law Degree (3+3) - B.S. + J.D.	116		
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NYS Sports Officiating.....	129
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Applied Psychology—BS

ABOUT THIS MAJOR:

The Applied Psychology B.S. degree program trains students in the knowledge and skills needed for a rewarding career in the helping professions. This degree prepares its graduates for:

- Non-licensed entry-level positions in human and social service settings;
- Advancement from current positions to positions that require a bachelor's degree;
- Application to graduate level education in Social Work, Mental Health Counseling, Psychology, Applied Behavior Analysis, and Law, among other disciplines.

Disclaimer

As with other baccalaureate programs in Psychology, the completion of this baccalaureate degree will not qualify the holder to apply for, be hired for, or perform the duties related, to employment involving the provision of services that may only be provided by licensed psychologists or other licensed mental health professionals with advanced training. Please refer to relevant statutes in the states you may be interested in practicing in.

PROGRAM OPTIONS:

Our unique approach includes the traditional focus on psychological research and theory in a liberal arts context, but includes a strong, real-world applied focus. The Applied Psychology program at SUNY Canton currently offers:

- B.S. degree
- Double Major option
- Minor option
- Microcredentials
- Online, in-person, or combined format

CAREER READY AT GRADUATION:

Our mission is to provide students with the skills needed to help people of diverse backgrounds and with varied life issues.

Students in the Applied Psychology program work with children and families, individuals with developmental disabilities, older adults, and those seeking drug and alcohol services, among others.

Graduates will be prepared to work in a variety of entry-level human service positions - interviewing, problem-solving with other professionals, and providing intervention services under professional supervision.

CAREER OPPORTUNITIES:

According to the U.S. Department of Labor, Bureau of Labor Statistics, employment in entry-level human services jobs requiring a Bachelor's degree is projected to grow faster or much faster than the average for all occupations, with a 10-percent anticipated increase through 2031.

For students who want to go further, we can also prepare you for advanced study in Psychology, Counseling, Human Services, Habilitation and Rehabilitation, and Social Work.

ADMISSION REQUIREMENTS:

- High school prerequisites may be found at www.canton.edu/academics/prerequisites.html
- Transfer students must have a minimum GPA of 2.0 OR a two-year degree.

PROGRAM REQUIREMENTS: CURRICULUM (1965)

PLEASE CONTACT US FOR MOST CURRENT INFORMATION

REQUIRED COURSES CREDITS

Semester I	
FYEP 101	First Year Experience Program.....1
ENGL 101+	Composition & the Spoken Word (GER 1& 2)3
PSYC 101+	Introduction to Psychology (GER 7).....3
	General Elective or MATH pre-req**... 3-4
HUSV 201+	Intro. to Human Services*.....3
	General Elective (GER 6, 8, 9, 10, 11).....3
	16-17

Semester II	
ABAP 245+	Introduction to Applied Behavior Analysis3
SOCI 101+	Intro to Sociology (GER 7).....3
PSYC 225+	Human Development3
	BIOL 101, 117, 150 & Lab+ Science Elective (GER 5) 3-4
	General Elective3
	15-16

Semester III	
PSYC 275+	Abnormal Psychology: (GER 7)3
SSCI 181+	Alcohol Drugs & Society(GER 7)3
MATH 141+	Statistics* (GER 4).....3
	General. Elective3
	General. Elective (GER 6, 8, 9, 10, 11).....3
	15-16

Semester IV	
PSYC 308	Personality and Individual Differences3
	General Elective3
HUSV 310+	Working in Human Service Agencies3
+	Program Elective.....3
+	Program Elective.....3
	15-16

AS or AA GRAD..... Total Credits: 62-64

Semester V	
SSCI 370	Research Methods ** (WI).....3
HUSV 305	Professional & Ethical Responsibilities3
PSYC 300	Cultural Psychology (GER 3).....3
HUSV 315	Mental Health Practice3
	Program Electives3
	15

Semester VI	
PSYC 410	Counseling Skills & Process3
PSYC 320	Health Psychology3
PSYC 315	Crisis Intervention.3
PSYC 340	Social Psychology3
	Program Elective3
	15

Semester VII	
HUSV 420	Orientation to Human Services Practicum1
	Program Elective3
	U/L Program Elective.....3
	HUSV 421*** Practicum in Human Services.....3
	General Elective.....3
	15

Semester VIII	
	HUSV 421*** Practicum in Human Services.....3
	U/L Program Elective.....3
	General Elective.....3
	General Elective.....3
	General Elective.....3
	15

BS GRAD Total Credits for Degree 122-124

L/L Program electives include: ABAP, ECHD, EDUC, HUSV, PSYC, SOCI, and designated ECHD, SSCI, and JUST courses.

**MATH 141 is a prerequisite for SSCI 370; may use first semester General Elective for MATH 141 pre-requisite if necessary*

***Writing Intensive course*

****Applied learning course*

+Courses to be used to meet Liberal Arts Associate's Degree. Student must take Science with a lab. for the Associate's degree.

Civil & Environmental Engineering Technology—B. Tech.

The Civil & Environmental Engineering Technology (C&EET) curriculum provides students with a Bachelor of Technology (BTech) degree that meets the demands of today's industry.

Students receive hand-on training and the background necessary to be competitive and successful in civil and environmental engineering technology. Flexibility with program electives allows students to study in areas of structural analysis and design, water and wastewater testing and treatment, environmental remediation, transportation, pavements, geotechnological, construction and project management, surveying, and AutoCADD/REVIT drafting and BIM. Graduates have the opportunity to pursue graduate study and work towards licensure.

STUDENTS IN THIS MAJOR:

- Master the knowledge, techniques, skills, and modern tools in civil and environmental engineering technology.
- Select and apply engineering, technology, science, mathematical skills to applications, problems and design.
- Conduct experiments, analyze, interpret, and apply experimental results.
- Have knowledge of construction and earth materials; their properties, use, manipulation, and testing procedures.
- Proficient in common water, wastewater, and soil collection and testing procedures.

CAREER OPPORTUNITIES:

Employment opportunities span the range of industry and commerce. Opportunities include:

Structural/Environmental/Construction Engineering and Technology, Civil/Environmental Engineer, Engineering Assistant, Structural Design and Detailers, Assistant Project Manager/Engineer/Environmental Engineer, Environmental Technologist, QC Engineering Technologist, Groundwater Engineer, Municipal Water/Wastewater Treatment Plant Operator, Geotechnical Engineer, Construction Project Estimator, Construction Inspectors and Residential & Commercial/General Contractors. Recent graduates have started their career with companies like Kiewit Corporation, GHD, Atlantic Testing Laboratories, Cives Steel Company, NYS Department of Transportation, and NYS Department of Conservation. Graduates have also gone on to graduate school for Master of Science/Engineering degrees in both Civil Engineering and Environmental Engineering and Doctor of Philosophy degree in Civil Engineering.

CAREER OUTLOOK

- Employment opportunities for civil and environmental engineering technicians are expected to increase by 6% and 5%, through 2028 due to the growth and repair of infrastructure (highways, bridges, dams, etc).
- Employment in environmental technology is expanding because of the increased awareness of environmental issues, and more stringent regulations.

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street, Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Freshmen will meet all general admission requirements to SUNY Canton.
- Students should have completed four years regents level high school math and be ready for Pre-Calculus (MATH 123) and College Physics I (PHYS 121/125). Students not meeting these criteria will be required to take prerequisite math courses.
- Students with a two-year college degree in a related program area will be evaluated and awarded maximum credit. They must have a minimum grade point average of 2.00. Other transfer students will be evaluated on case-by-case basis.

PROGRAM REQUIREMENTS:

(CURRICULUM 2488)

SEMESTER I	CREDIT
ENGS 101 Intro to Engineering	2
SOET 116 Intro to Computer Drafting	2
CONS 101 Elementary Surveying	4
MATH 123 Pre-Calculus ¹	4
CHEM 150 College Chemistry and Lab	4
	16

SEMESTER II

CONS 203 Advanced Surveying	3
SOET 250 Intro to 3D CADD and BIM	2
MATH 161 Calculus ¹	4
PHYS 122/132 College/Univ. Physics I	3
PHYS 126/136 College/Univ. Physics I Lab	1
ENGL 101 Composition and the Spoken Word	3
	16

SEMESTER III

ENGS 201 Statics	3
CONS 280 Civil Engineering Materials	3
MATH 162 Calculus II ¹	4
GER (6, 7, 8, 9, 10, 11) ³	3
PHYS 122/132 College/Univ. Physics II	3
PHYS 126/136 College/Univ. Physics II Lab	1
	18

SEMESTER IV

CONS 216 Soils In Construction ²	4
CONS 322 Hydraulics	4
ENGS 203 Strength of Materials	3
CONS 275 Strength of Materials Lab	1
Diversity GER (3) ³	3
GER (6, 7, 8, 9, 10, 11) ³	3
	18

SEMESTER V

CONS 336 Structural Analysis	3
CONS Course ⁴ (CONS 386 or CONS 385)	4
MATH 364 Differential Equations ¹	4
Program Elec. ⁶	3
	13

SEMESTER VI

ECON 370 Engineering Economics	3
CONS 274 Construction Management	3
CONS Course ⁴ (CONS 387 or CIVL 384)	3
CIVL 339 Structural Analysis Lab	1
Program Elec. ⁶	3
Design Elective ⁵	3
	16

SEMESTER VII

SOET 377 Engineering Ethics	1
CONS Course ⁴ (CONS 386 or CONS 385)	4
CONS 476 Pre-Capstone	1
Program Elec. ⁶	6
GER (6, 7, 8, 9, 10, 11) ³	3
	15

SEMESTER VIII

CONS 477 Capstone Project	3
SOET 348 Engineering Safety	1
CONS Course ⁴ (CONS 387 or CIVL 384)	4
Program Elec. ⁶	6
	14

Total Required Program Credits = 125

¹ Students starting with Calculus I, will take Calculus I, Calculus II, Differential Equations, and a fourth math class of their choosing and with advisement.

² Writing Intensive

³ GER = General Education Elective. Students must accomplish 7 separate GER categories: GER 9, 6, 7, 8, 9, 10, or 11. One of which must be the Diversity GER (GER 3). Depending on Program Elective selection students may need to take one or more 300/400 level GER courses in order to reach 45 upper division credits.

⁴ Design Elective: All students must take at least one civil structural design course (CONS 304, CONS 324, or CONS 370).

⁵ Program Electives: A list of approved Program Electives is provided below. Courses taken outside of the program must be approved by either the civil department academic advisor or civil department chair. Students wanting to focus on environmental engineering technology must take CHEM 155 and BIOL 150 as program electives. Students must be sure that enough 300/400 level courses are taken to fulfill the minimum requirement of 45 upper division courses.

Approved Program Electives: CIVL 305, CIVL 381, CIVL 480, CIVL 3XX, CIVL 4XX, CMGT 410, CONS 111, CONS 112, CONS 222, CONS 226, CONS 304, CONS 316, CONS 324, CONS 338, CONS 350, CONS 366, CONS 368, CONS 370, CONS 372, CONS 375, CONS 432, CONS 472, CONS 485, CONS 486, CONS 487, CONS 3XX, CONS 4XX, CHEM 155, BIOL 150, SOET 314, SOET 352, SOET 353

NOTE: Civil & Environmental Technology students must meet seven of the ten and have a total of 30 credits for the General Education Requirements. There are a total of 125 program credits.

Student Learning Outcomes can be found at www.canton.edu/soet/cet/.

Crime Analysis—B.S

The four-year, undergraduate Bachelor of Science in Crime Analysis combines a core concentration in crime analysis with select courses in data analytics, cyber security, and geographic information systems. Through-out this program, students identify solutions to crime problems and learn to formulate crime prevention strategies. Additionally, students learn crime mapping and the application of statistics to understand the techniques available to map crime and provide predictive analytics to criminal justice agencies. Applying spatial analysis and mapping, quantitative assessment, and using standard software packages, individuals who complete the program will be prepared to understand investigative techniques and data in order to provide criminal justice agencies with tactical, operational, and strategic crime analysis products. Students will also be prepared to enroll in and pass the New York State Division of Criminal Justice Services crime analysis certification examination.

STUDENTS IN THIS MAJOR:

- Receive training in spatial & data analysis
- Learn components associated with the NYS crime analysis certification exam
- Complete classes toward a minor, including Forensic Science, Criminology, or Homeland Security

CAREER OPPORTUNITIES:

- Crime Analyst
- Criminal Justice Research Analyst
- Law Enforcement
- Intelligence Analyst
- Criminal Justice Policy Analyst
- Public Policy and Administration

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0 or above.

Recommended preparatory courses or their equivalencies are:

JUST 232 Intelligence Analysis
 JUST 233 Crime Analysis
 MATH 111 Survey of Mathematics OR
 MATH 121 College Algebra
 MATH 141 Statistics

PROGRAM REQUIREMENTS:

(CURRICULUM 3006)

SEMESTER I	CREDITS
JUST 233 Crime Analysis	3
ENGL 101 Composition & Spoken Word.....	3
MATH Elective (GER 4).....	3
Liberal Arts Elective (Any GER).....	3
Liberal Arts Elective (GER 6,7,8,9,10,11)	3
	15

SEMESTER II

JUST 232 Intelligence Analysis	3
CITA 110 Introduction to Info Technology	3
MATH 141 Statistics (GER 4).....	3
Natural Science (GER 5).....	3-4
Liberal Arts Elective (Any GER).....	3
	15-16

SEMESTER III

JUST204 Crime and Media	3
Liberal Arts Elective.....	3
Liberal Arts Elective.....	3
DEISJ Elective(GER 3)	3
Liberal Arts Elective.....	3
	15

SEMESTER IV

Liberal Arts Elective.....	3
Liberal Arts Elective.....	3
Liberal Arts Elective.....	3
General Elective.....	3
General Elective.....	3
	15

SEMESTER V

JUST 421 Cyber Criminology.....	3
JUST 380 Civil Liberties & Homeland Sec.	3
Liberal Arts Elective.....	3
Liberal Arts Elective.....	3
General Elective.....	3
	15

SEMESTER VI

JUST 347 Res Methods in Criminology & CJ ..	3
JUST 314 Ethics in CJ*	3
JUST 423 Intelligence Led Policing.....	3
U/L Liberal Arts Elective	3
U/L Liberal Arts Elective	3
	15

SEMESTER VII

JUST 402 GIS: Crime Mapping	3
CYBR 365 Digital Forensic Analysis.....	3
JUST 425 Law Enforce. Intell. Systems	3
Liberal Arts Elective.....	3
Liberal Arts Elective.....	3
JUST 429 Intro to Culm. Exp.....	1
	16

SEMESTER VIII

JUST 450 or Forensic Evidence on Trial.....	3
LEST340 Constitutional Law	
JUST 430 Culminating Experience in CJ OR (4) U/L Program Electives	3-12
	15

Students in the Criminal Investigation, B.Tech. program are required to earn a "C" or better in JUST 430.

** Fulfills writing intensive requirement.*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Crime Analysis students must meet seven of the ten General Education Requirements and have 30 total GER credits.

Student Learning Outcomes can be found at www.canton.edu/sci_health/ci/.

Criminal Investigation—B. Tech.

The Bachelor of Technology in Criminal Investigation provides a unique alternative to traditional criminal justice programs. This degree focuses on developing the necessary knowledge and skills required in criminal investigations. Students can opt to complete an internship with an agency in the Criminal Justice field or complete 5 Upper Level JUST courses

STUDENTS IN THIS MAJOR:

- Receive advanced training in criminal investigation.
- Learn to analyze forensic evidence, preserve crime scenes, collect and process evidence.
- Complete classes toward a minor, including Forensic Science or Criminology.

CAREER OPPORTUNITIES:

- Police Officer
- Federal law enforcement agencies
- Autopsy Technician/Medical Investigator
- Military police
- Crime Scene Technicians
- Forensic Scientist

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0 or above.

Recommended preparatory courses or their equivalencies are:

JUST 101	Introduction to Criminal Justice
JUST 110	Criminal Law
JUST 111	Criminal Procedure
JUST 203	Criminal Investigations
JUST 209	Law Enforcement Communications
JUST 210	Introduction to Forensic Investigation

MATH 111	Survey of Mathematics OR
MATH 121	College Algebra

PROGRAM REQUIREMENTS:

(CURRICULUM 1359)

SEMESTER I	CREDITS
JUST 101 Intro. to Criminal Justice	3
ENGL 101 Composition & Spoken Word	3
MATH Elective (GER)*	3
PSYC 101 Introductory Psychology	3
Liberal Arts Course (Any GER)	3
	<u>15-16</u>

SEMESTER II

JUST 112 Criminal Law & Procedure	3
SOCI 101 Introduction to Sociology	3
Lower Level Program Elective1	3
Natural Science w/Lab (GER)	4
Humanities Elective (GER)	3
	<u>16</u>

SEMESTER III

JUST 201 Critical Issues in Crim. Justice*	3
JUST 209 Law Enforc. Communications	3
PSYC 275 Abnormal PSYC OR	
JUST 202 Intro to Forensic Criminology	3
JUST 204 Crime and Media	3
American History Elective (GER 4)	3
	<u>15</u>

SEMESTER IV

JUST 203 Criminal Investigations	3
JUST 210 Intro. to Forensic Invest.	3
Lib. Arts Elective (any GER)	3
General Elective	3
General Elective	3
	<u>18</u>

SEMESTER V

JUST 300 Forensic Photography	3
JUST 303 Investigative Interviews	3
Upper Level General Elective	3
General Elective	3
General Elective	3
	<u>15</u>

SEMESTER VI

JUST 301 Latent Prints and Impressions	3
JUST 314 Ethics in Criminal Justice ³ OR	
JUST 426 Ethics in Forensic Science ³	3
Forensic Science Cluster ⁴	3
General Elective	3
General Elective	3
	<u>15</u>

SEMESTER VII

JUST 406 Crime Scene Investigation	3
JUST 408 The Investigation of Death	4
JUST 429 Intro. to Culminating Experience ⁵	1
U/L General Elective	3
General Electives	6
	<u>16</u>

SEMESTER VIII

JUST 430 Culminating Experience in CJ OR	
(5) U/L Program Electives	3-15
	<u>15</u>

* MATH 111 or higher is required – NOTE: If you are enrolling in a course that is a pre-requisite for a required course in your program, your TAP eligibility may be affected.

** Fulfills writing intensive requirement.

** Writing intensive course.

1. Lower Level Program Electives are selected from JUST or EADM (100-200) level courses

2. UL Program Electives are selected from JUST, EADM or LEST (300-400) level courses

3. A student CAN earn credit for both courses but is only required to take one or the other.

4. Choose one from this list: JUST330 Questioned Documents, JUST411 Forensic Drug Analysis and Investigation, JUST412 Firearm and Toolmark ID, JUST413 Methods of Human Skeletal ID

5. This course is only required for students intending to take JUST 430, Culminating Experience, in the 8th semester

Student Learning Outcomes can be found at www.canton.edu/sci_health/ci/.

Criminal Justice: Law Enforcement Leadership—*B. Tech.*

The Law Enforcement Leadership program blends the disciplines of criminal justice, law enforcement and management. It provides the foundation to allow graduates to seek entry positions in law enforcement or to seek promotion into supervisory and management positions. Most graduates of this program will seek employment with law enforcement agencies, other governmental agencies or in the private sector. Since the program provides ample opportunities for electives, students may choose electives that may help them to develop or hone management skills, or acquire knowledge and skill in law enforcement techniques.

STUDENTS IN THIS MAJOR:

- Develop leadership and managerial skills needed to succeed in contemporary law enforcement agencies.
- Analyze critical issues in law enforcement
- Study under the tutelage of experienced criminal justice professionals.
- Are exposed to current issues and state-of-the-art technology.
- Culminate their education with a semester-long internship or additional course work.
- Qualified students have the opportunity to attend the SUNY Canton Law Enforcement Academy as an internship site.
- Can choose to take all classes for the degree online!

CAREER OPPORTUNITIES:

- Law enforcement officers at local, state and federal level
- Law enforcement management for municipal, state, and federal agencies
- Probation and Parole
- Security consultants
- College and university campuses

CAREER OUTLOOK:

- The U.S. Bureau of Labor Statistics projects that employment in law enforcement will grow at a rate similar to the average for all occupations. This suggests that there will be a consistent demand for police and detective positions over the next decade.
- Higher education requirements for entry level employees of law enforcement agencies at all levels are becoming more common.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0.

PROGRAM REQUIREMENTS

(CURRICULUM 1911)

SEMESTER I	CREDITS
JUST 101 Introduction to Criminal Justice.....	3
BSAD 100 Intro. to Business.....	3
ENGL 101 Composition & Spoken Word.....	3
MATH 111 Survey of Math or Higher.....	3
PSYC 101 Introduction to Psychology.....	3
	<u>15</u>

SEMESTER II

JUST 112 Criminal Law and Procedure.....	3
SOCI 101 Introduction to Sociology.....	3
Amer. History Elective (GER 9)	3
Humanities Elective (GER 6)	3
General Elective.....	3
	<u>15</u>

SEMESTER III

CITA 110 Intro. to Information Technology	3
MATH 141 Statistics	3
Natural Sci. w/Lab Elect. (GER 5) ...	4
JUST 204 Crime and Media	3
General Elective.....	3
	<u>16</u>

SEMESTER IV

JUST 201 Critical Issues in Criminal Justice **..	3
JUST 207 Police Services.....	3
JUST 209 Law Enforcement Communication	
OR	
BSAD 200 Business Communications.....	3
Liberal Arts Elective [GER]	3
General Elective.....	3
	<u>15</u>

SEMESTER V

JUST 321 Managing Law Enforce. Training.....	3
JUST 344 Civil Liability Issues for CJ Admin. ...	3
BSAD 301 Principles of Management	3
U/L Program Elective ²	3
U/L Program Elective ²	3
	<u>15</u>

SEMESTER VI

JUST 314 Ethics in Criminal Justice OR	
BSAD 319 Professional Ethics.....	3
JUST 333 Managing Patrol Functions.....	3
U/L Program Elective ²	3
U/L Program Elective ²	3
General Elective.....	3
	<u>15</u>

SEMESTER VII

JUST 429 Intro to Culminating Experience *....	1
JUST 449 Current Issues in Law Enforce.	3
JUST 335 CJ Agency Management	3
BSAD 375 Leadership & Decision Making.....	3
General Elective.....	3
General Elective	3
	<u>16</u>

SEMESTER VIII

JUST 430 Culminating Exper. in CJ AND/OR	
U/L Program Electives.....	3-15
	<u>15</u>

**This course is only required for students intending to take JUST 430 Culminating Experience.*

***Writing Intensive course*

U/L = Upper Level course (300/400)

GER = General Education Requirement

Program Electives: JUST, BSAD, or LEST

NOTE: Criminal Justice: Law Enforcement Leadership students must meet seven of the ten General Education Requirements and have 30 total General Education credits.

Student Learning Outcomes can be found at www.canton.edu/sci_health/lelm/.

Cybersecurity—B.S.

The Bachelor of Science in Cybersecurity program prepares students to assess security needs of computer and network systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices, systems, and procedures. The program includes instruction in computer architecture, programming, and systems analysis; networking; telecommunications; cryptography; security system design; applicable law and regulations; risk assessment and policy analysis; contingency planning; user access issues; investigation techniques; and troubleshooting. The Program of Study (PoS) has been validated by the National Security Agency (NSA) for the National Centers of Academic Excellence in Cybersecurity Defense (CAE-CD) designation.

STUDENTS IN THIS MAJOR:

- Develop management skills, communication skills, and other skills in order to meet their challenging career.
- Are taught by qualified faculty in small classes.
- Gain hands-on experience on security and risk management, asset security, security engineering, communication and network security, identity and access management, security assessment and testing, security operations, and software development security.
- Are encouraged to pursue Cybersecurity internships during their senior year.

CAREER OPPORTUNITIES:

- Cybersecurity Forensic Specialist
- Security Analyst
- Security Auditor
- Security Consultant
- Security Risk Assessor
- Security Manager
- Information Security Officer
- Security Trainer
- Security Systems Designer

POTENTIAL EMPLOYERS:

- Information Security / Information Technology Companies
- Health Management Services
- Financial Services
- Government

- Education
- Military
- Information Security / Information Technology Departments in any industry

ADMISSION REQUIREMENTS:

- Students who do not meet the requirements to enroll in Math 106 or English 101 will need to take an additional course(s) that will prepare them for sub-sequent enrollment in those two courses.
- Computer or technology courses are strongly recommended.
- Transfers into this program must have a 2.0 GPA for admission. Students from other institutions and majors may have to complete certain bridge courses that could extend their graduation date.

Students who do not meet necessary pre-requisites may be admitted to the College. However, completing the program may require more than four years.

PROGRAM REQUIREMENTS: *

(CURRICULUM 2698)

SEMESTER I	CREDITS
CYBR 152 Computer Logic	3
CYBR 165 Survey of Cybersecurity	3
ENGL 101 Composition & Spoken Word	3
Mathematics Elective1	3
LA Course (GER 6,7,8,9,10,11)	3
	<u>15</u>

SEMESTER II

CYBR 170 Comp. Concepts & Oper. Sys.	3
CYBR 171 Oper. Sys. Use & Administration	3
MATH 141 Statistics	3
Diversity Elective (GER 3)	3
Natural Science Elective (GER 5)	3
	<u>15</u>

SEMESTER III

CYBR 180 Introduction to Programming	4
CYBR 215 Database Apps & Concepts	3
CYBR 220 Data Comm & Network Tech	3
LA Course (GER 6,7,8,9,10,11)	3
LA Course (GER 6,7,8,9,10,11)	3
	<u>16</u>

SEMESTER IV

CYBR 204 Systems Analysis and Design ²	3
CYBR 250 Information Security	3
GER/LA Course	3
GER/LA Course	3
LA Course	3
Program Elective ³	3
	<u>15</u>

SEMESTER V

Network Security Cluster	3
Data Security Cluster	3
MATH 351 Discrete Mathematics	3
LA Course	3
General Elective	3
	<u>15</u>

SEMESTER VI

CYBR 352 Ethical Hacking & Pen Testing	3
Network Security Cluster	3
Data Security Cluster	3
LA Course	3
General Elective	3
	<u>15</u>

SEMESTER VII

CYBR 450 Cyber Security Body of Knowledge ..	3
LA Course	3
UL LA Course	3
UL LA Course	3
UL LA Course	3
	<u>15</u>

SEMESTER VIII

CYBR 485 Cybersecurity Practice <u>OR</u>	
UL Program Elective ²	6
UL Program Elective ²	6
UL LA Course	3
UL LA Course	3
UL General Elective	3
	<u>15</u>

*Program Elective-CYBR, CITA, DATA, JUST
Seven of ten SUNY GER academic areas and 30 credits of
SUNY GER courses must be completed within the first two
years of full-time study of the program.
Network Cluster-CYBR 354, CYBR 356, CYBR 440
Data Security Cluster-CYBR 360, CYBR 365, CYBR 455
1 Minimum mathematics requirement is MATH 121 Col-
lege Algebra.
2 Fulfills writing intensive requirement.
3 On-campus students are encouraged to take CITA 175,
CITA 221, and CITA 441 to fulfill this program elective
requirement.*

ADDITIONAL GRADUATION REQUIREMENTS

To meet graduation requirements, CYBR 450 must have a grade of C or higher. No more than 3 CITA credits with a course number below CITA 150 may be used for credit towards graduation.

Data Science and Analytics—B.S.

The Bachelor of Science in Data Science and Analytics is an interdisciplinary program that combines data science with data analytics, mathematics, statistics, artificial intelligence and computer science. Students will hone analytical and hands-on skills to recognize value that can be derived from data collection to data analysis. Experiential learning is a core component of the program applying programming languages, predictive and prescriptive statistical models, data mining, and machine learning to data-based decision making. Special emphasis is placed on ethics in data science, data anonymization, security and privacy, with an applied focus on making mathematically valid and ethically sound decisions. Subjects from computer logic, statistical methods, discrete mathematics, data visualization, machine learning, data mining, R-programming, big data and deep-learning are covered. Graduates from the program will be prepared to work as data scientists and analysts or can continue their education in graduate level data science and analytics programs.

STUDENTS IN THIS MAJOR

- Apply statistical and computational techniques to analyze and interpret large and complex datasets.
- Will be proficient in data collection, cleaning, storage, and management using various tools and technologies, ensuring data integrity and accessibility.
- Will be skilled in programming languages such as Python, R, and SQL, and will be able to develop software solutions and applications tailored to data science problems.
- Are encouraged to pursue Data Science internships during their senior year.

ADMISSION REQUIREMENTS

- Refer to the table of high school course prerequisites for admission.

- Students must be qualified to enter at least MATH 106 Intermediate Algebra and Composition and the Spoken Word (ENGL 101).
- Computer or technology courses are strongly recommended.
- Transfers into this program must have a 2.0 GPA for admission. Students from other institutions and majors may have to complete certain bridge courses that could extend their graduation date.

Students who do not meet necessary prerequisites may be admitted to the College. However, completing the program may require more than four years.

PROGRAM REQUIREMENTS

(CURRICULUM 3262))

SEMESTER I	CREDITS
CYBR 153 Computer Logic & Algorithms.....	3
DATA 155 Survey of Data Science	3
ENGL 101 Composition and the Spoken Word (GER 1/2)	3
Mathematics Elective1 (GER 4) ...	3-4
Natural Science Elective (GER 5) ..	3-4
	15-17

SEMESTER II

CYBR 181 Programming Fundamentals.....	4
DATA 230 Applied Data Science R-Programming.....	3
MATH 141 Statistics (GER 4)	3
MATH 121 or MATH 123..... College Algebra or Pre-Calculus (GER 4)	3
Liberal Arts Elective (GER 3)	3
	16

SEMESTER III

CYBR 216 Database Fundamentals.....	3
CYBR 172 Computer Fundamentals.....	3
MATH 161 Calculus I	3
Liberal Arts Elective (GER 6, 8, 9, 10, 11)	3
Liberal Arts Elective (GER 6, 8, 9, 10, 11)	3
	15

SEMESTER IV

DATA 240 AI Fundamentals (WI)**	3
DATA 315 Data Mining & Machine Learning... Liberal Arts Elective (GER 7)	3
Liberal Arts Elective (Any GER)	3
Liberal Arts Elective.....	3
	15

SEMESTER V

DATA 320 Data Security and Privacy	3
DATA 371 Methods of Data Representation	3
MATH 351 Discrete Mathematics	3
General Elective.....	3
Liberal Arts Elective.....	3
	15

SEMESTER VI

DATA 415 Ethics in Data Science	3
DATA 321 Big Data Fundamentals	3
General Elective.....	3
Liberal Arts Elective.....	3
U/L Liberal Arts Elective	3
	15

SEMESTER VII

DATA 420 Advanced Data Mining and Machine Learning.....	3
DATA 421 Deep-Learning Fundamentals.....	3
U/L Liberal Arts Elective	3
U/L Liberal Arts Elective	3
	12

SEMESTER VIII

DATA 485 Data Practice OR U/L Program Elective2	
U/L Program Elective2.....	6
U/L General Elective	3
U/L Liberal Arts Elective	3
U/L Liberal Arts Elective	3
	15

**** Fulfills writing intensive requirement.**

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

LA = Liberal Arts and Sciences

Students in this program must take at least 45 UD credits and a minimum of 60 LA credits.

Students need to pass a total of 30 GER credits with a course in at least 7 of the 10 GER categories.

Digital Communications and Storytelling—B.S.

SUNY Canton's Bachelor of Science in Digital Communications and Storytelling is a career-focused program of study cultivating expertise in the latest technology for building community and sharing ideas. The program offers an opportunity to explore writing for multimedia, database applications, presentation tools, application design, and digital mapping, all while considering audience, context, and the literary, architectural, interactive, and design elements of media.

Students learn vital workplace skills including professional and media writing, a variety of communications methods designed to reach general and specialized audiences, and learn best practices in the field of digital communications to craft innovative projects as part of guided internship experiences. Graduates are well-qualified for entry-level professional opportunities in fields such as public relations, advertising, and cultural heritage, as well as businesses and nonprofit organizations looking for trained writers and narrators who are well-versed in the most recent digital communication technology.

STUDENTS IN THIS MAJOR:

- Explore the use of emerging social and digital media outlets for effective communication and messaging.
- Understand industry standard design frames such as User Experience (Ux) and Design Thinking
- Use the latest digital technology to create innovative communications and content to effectively reach specialized and general audiences.
- Collaborate in designing and mapping content to create powerful narratives designed for a variety of media channels.
- Work closely with expert faculty mentors to learn to effectively present, organize, and articulate thoughts, ideas, viewpoints, and conclusions both orally and/or in writing.

- Gain significant practical experience with internships focusing on development and publication of traditional and new media content.

CAREER OPPORTUNITIES

The employment opportunities cover a broad range, including major businesses and non-profit organizations. Graduates will be prepared for employment opportunities in:

- Advertising
- Public Relations
- Web/Social Media Content Management
- Design for Gaming Industry
- Editing
- Grant Writing
- Building and Maintaining Digital Archives
- Narrative Writing
- Media Project Management
- Podcasting

ADMISSION REQUIREMENTS

- Refer to the table of high school course prerequisites for admission.
- Students must be prepared to take ENGL 101 (Composition and the Spoken Word).
- Transfer students must meet re-registration requirements to be considered for admission.

PROGRAM REQUIREMENTS

(CURRICULUM 3261)

SEMESTER I	CREDITS
TCOM 100 Introduction to Technological Communications.....	3
Math Elective (GER 4).....	3-4
American History Elective (GER 9).....	3
ENGL 101 Composition and the Spoken Word (GER 10)	3
Social Science Elective (GER 7)	3
FYEP 101 First Year Experience.....	1
	17-18
SEMESTER II	
DEISJ (GER 3)	3
Arts Elective (GER 8)	3

ENGL/TCOM 200 Narrative Form in Video Games	3
Humanities Elective (GER 6)	3
General Elective	3
	16-17

SEMESTER III

ENGL 270 Media Writing*	3
ENGL/TCOM 314 Digital Graphic Storytelling.....	3
Science Elective (GER 5)	3-4
World Language (GER 11).....	4
General Elective	3
	15

SEMESTER IV

ENGL 380 Intercultural Communications	3
ENGL/TCOM 322 Mobile Media Stories & Games	3
ENGL 370 Artificial Intelligence and Communications.....	3
World History and Global Awareness (GER 10)	3
Program Elective.....	3
	15

SEMESTER V

TCOM 310 Identity in the Digital Age	3
ENGL 301 Professional Writing.....	3
ENGL 302 Global Englishes.....	3
Program Elective.....	3
General Elective	3
	15

SEMESTER VI

TCOM 330 Digital Narratives Workshop	3
TCOM/ENGL 345 Electronic Literature.....	3
Program Elective (U/L Recommended)	3
Program or Liberal Arts Elective (U/L Recommended)	6
	15

SEMESTER VII

TCOM 400 Internship I	3
TCOM 360 Online Media & Pop Culture.....	3
Program Elective (U/L Recommended)	3
Program or Liberal Arts Elective (U/L).....	6
	15

SEMESTER VIII

TCOM 410 Internship II	3
TCOM 420 Senior Seminar	3
Program Elective (U/L Recommended)	3
Program or Liberal Arts Elective (U/L).....	6
	15

* *Fulfills writing intensive requirement.*
U/L = Upper Level Courses (300/400)
GER = General Education Requirement
Program Electives: ENGL and GRST

Early Childhood Care & Management—BBA

The Bachelor of Business Administration in Early Childhood Care and Management combines theory and practice for students seeking careers in the childcare field, working specifically with children from infancy - 5 years of age. The degree program prepares students for careers in childcare centers or various early childhood-based businesses and organizations within the early childhood and childcare industry.

Early Childhood upper-level program electives offer content relevant to the professional development and growth of the early childhood educator and early childhood director. Additional courses provide a strong business-focused foundation. Courses include content related to organizational leadership, human resources and fiscal management, small business management and ownership, and leadership.

The Bachelor of Business Administration in Early Childhood Care and Management program is accredited by the International Accreditation Council for Business Education.

PROGRAM DELIVERY:

The Bachelor of Business Administration in Early Childhood Care and Management can be completed fully online, on campus, or a combination of both. Students can begin enrollment in fall, summer, or spring and attend part or full-time.

STUDENTS IN THIS MAJOR:

- Participate in field-based experiences and internships in various childcare settings, including Head Start Programs, Universal Pre-K, and Kindergarten Public School Classrooms, Child Care Centers, Family Child Care Provider Homes, Nursery, and Pre-School programs, Children's Museums, Libraries, and additional Early Childhood Businesses and Organizations
- Design a final semester of study to include an internship, or capstone project, or enrollment in program electives or a combination of all, based on students' individual future career or academic goals.
- Take part in professional development opportunities offered through courses, conferences, trainings, seminars, and workshops

CAREER OPPORTUNITIES:

- Child Care Center Owner or Director
- Child Care Center Director
- Self-Employed Family Child Care Center Provider
- Early Childhood Resources and Referral Agencies
- Early Childhood Trainer or Consultant
- Early Childhood-Based Businesses and Organizations

- Head Start Program Administration
- Children's Museum Educator/Trainer

CAREER OUTLOOK:

- According to the U.S. Department of Labor, job opportunities for preschool and childcare center directors are favorable. **Employment statistics from Bureau of Labor Statistics 2019-2029, May 2020*
- Certification requirements are increasing for Early Care and Education providers. Bachelor's Degrees are necessary to work in lead administrator positions in childcare facilities and Head Start programs.
- Changes in society and the workforce demand an increase in the availability of high-quality early childcare and education options for families and children from infancy to pre-kindergarten.

ADMISSION REQUIREMENTS:

Students must meet entrance requirements and be eligible for enrollment in:

- Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum 2.0 GPA for admittance to the ECHD major
- Transfer students must meet re-registration requirements to be considered for admission
- Prior Learning Credit and/or Course Substitution Options for students working in licensed childcare centers 20+ hours weekly
- Students who do not meet ECHD admission requirements may enroll in preparatory courses. Students must pass all *preparatory courses and have a minimum 2.0 GPA for admittance to the ECHD program.
- Graduates of BOCES Early Childhood Occupations programs may be eligible for 3-6 college credits toward the Early Childhood Program at SUNY Canton. Refer to the College catalog for a list of BOCES Programs for which we have articulation agreements.

PROGRAM REQUIREMENTS:

- Students are required to complete mandated trainings offered through NYS Office for Children: Mandated Reporter Identification of Child Abuse & Neglect and Building on the Foundations in Health, Safety & Nutrition [Included in ECHD 121 course content]
- Early Childhood students must complete a Health Clearance through the SUNY Canton Davis Health Center; have evidence of a recent physical exam, and updated immunizations.
- For off campus field experiences (ECHD 201 and the Internship) residential students will need to arrange for coordination of and/or transportation to their assigned placement sites. Distance students' complete student teaching

and internship experiences near their residence and attend seminars virtually.

(CURRICULUM 2699)

SEMESTER I	CREDITS
FYEP 101 First Year Experience	1
ECHD 101 Introduction to Early Childhood (GER 7)	3
ENGL 101 Composition & the Spoken Word (GER 1-2)	3
PSYC 101 Introduction to Psychology	3
Science Elec. (GER 5)	3-4
Diversity: EI & SJ (GER 3)	3
	16-17
SEMESTER II	
BSAD 100 Introduction to Business	3
ECHD 121 Wellness in Young Children	3
PSYC 220 Child Development	3
Math Elective (GER 4)	3-4
ECHD 131 Infants and Toddlers	3
	15-16
SEMESTER III	
ECHD 105 Orientation EC Field Experience	1
ECHD 125 Curriculum Development	3
ACCT 101 Foundations of Fin. Accounting	4
ECHD 250 Children with Special Needs	3
GER (6,8,9,10,11)	3
General Elective	3
	17-18
SEMESTER IV	
ECHD 201 Early Childhood Field Experiences	4
ECHD 204 Early Childhood Observation	3
ECHD 285 Issues & Policies in Early EC & ED* - WI	3
BSAD 203 Marketing	3
GER (6,8,9,10,11)	3
	16
SEMESTER V	
ECON 101 Principles of Macroeconomics	3
BSAD 215 Small Business Management	3
ECHD 340 Policies & Regulations in EC Settings	3
ECHD 404 Positive Child Guidance	3
General Elective	3
	15
SEMESTER VI	
BSAD 319 Professional Ethics	3
BSAD 310 Human Resource Management	3
ECHD 401 DAP: Learning Environments Infants-Age 5	3
ECHD 301 Fostering Relationships in EC Programs	3
U/L Program Elective	3
	15
SEMESTER VII	
ECHD 409 Orientation to Culminating Experience	1
ECHD 420 EC Program Development & Management	3
BSAD 340 Management Communications	3
U/L Program Elective	3
U/L Elective	3
U/L Elective	3
	16
SEMESTER VIII	
Early Childhood Care & Management Internship OR Capstone Project OR U/L Program Electives OR Combination of:	
ECHD 410 Internship AND/OR	3-12
ECHD 411 Capstone AND/OR	3-12
U/L Program Elective	3-12
	12

* Fulfills writing intensive requirement.

GER = General Education Requirement

NOTE: Early Childhood students must meet seven out of ten General Education Requirements.

Student Learning Outcomes can be found at: www.canton.edu/business/early_childhood/.

Electrical Engineering Technology—B. Tech.

The Electrical Engineering Technology (B. Tech.) program at SUNY Canton provides opportunities for students to acquire knowledge and practical skills necessary to begin a career in engineering technology as technologist or engineer.

PROGRAM EDUCATIONAL OBJECTIVES

1. Be effective in performing their duties as Engineers, Technologist, or Technician;
2. Be effective in writing and oral communications;
3. Be ready to expand knowledge in engineering profession through continuing education, or other life-long learning experiences;
4. Be committed to quality, timeliness and respect for diversity.

STUDENT LEARNING OUTCOMES

What students are expected to know and be able to do by the time of graduation:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
5. An ability to function effectively as a member as well as a leader on technical teams.

CAREER OPPORTUNITIES:

- Electronics Technologist or Engineer
- Biomedical Engineering Technologist
- Sale Engineering Technologist or Engineer
- Service Engineering Technologist or Engineer
- Systems Test Engineering Technologist or Engineer
- Product Engineering Technologist or Engineer
- Software Engineering Technologist
- Documentation Engineering Technologist or Engineer
- Quality Control Engineering Technologist or Engineer
- Applications Engineering Technologist or Engineer

- R&D Technologist or Engineer
- Engineering Assistant
- Power Sub-Station Design Engineer
- Graduate School

ACCREDITATION

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS

- Candidates must have a minimum of a high school diploma or GED.
- Students must be prepared to take Pre-Calculus (MATH 123) as a minimum mathematics course if not already completed.. If a student does not meet the criteria, he/she will be required to take prerequisites in math. All students with high school diploma or GED will be required to take a placement examination to determine his/her standing.
- Students who graduate with a two year college degree in a program related area will be evaluated and awarded maximum credit to enable him/her to complete the (B. Tech) degree in two years. Transfer students from community colleges, universities or other institutions of higher learning with some coursework completed will be evaluated on case-by-case basis. Minimum grades of “C” for transfer provided the content is comparable to that offered at SUNY Canton.

PROGRAM REQUIREMENTS:

(CURRICULUM 0216)

SEMESTER I CREDITS

ELEC 161	Electronic Fabrications	2
ENGL 101	Composition & the Spoken Word	3
MATH 123	Pre-Calculus	4
SOET 116	Intro to CAD & Design	2
ELEC 101	Electrical Circuits I	3
ELEC 109	Electrical Circuits I Lab	1
		15

SEMESTER II

Elec 141	Industrial Controls	2
ELEC 102	Electric Circuits II	3
ELEC 129	Electric Circuits II Laboratory	1
MATH 161	Calculus I	4
ELEC 165	Digi Fundamentals & Systems	3
ELEC 166	Digi Fundamentals & Systems Lab ..	1
		14

SEMESTER III

PHYS 121	College Physics I OR	
PHYS 131	University Physics	3
PHYS 125/135	Physics I Lab	1
ELEC 141	Industrial Controls	2
ELEC 213	Microprocessors	3
ELEC 231	Electronic Circuits	4
MATH 162	Calculus II	4
		17

SEMESTER IV

ELEC 243	Computer Automated Control Systems	2
ELEC 215	Electrical Energy Conversion	4
ELEC 225	Telecommunications	3
PHYS 122	College Physics II OR	
PHYS 132	University Physics II	3
PHYS 126/136	Physics II Lab	1
MATH 263	Calculus III	4
		17

SEMESTER V

ELEC 332	Industrial Power Electronics	3
ELEC 343	Advanced Circuit Analysis	3
SOET 377	Engineering Ethics	1
MATH 141	Statistics 1	3
MATH 364	Differential Equations	4
	Diversity Elective Course (GER 3) ..	3
		17

SEMESTER VI

ELEC 380	LAN/WAN Technology	3
ELEC 383	Power Transmission and Distribution	3
ELEC 385	Electronic Communications I	3
SOET 348	Engineering Safety	1
	Program Elective	3
	Elective (GER 3, 4, 5, 6, 8, 9)	3
		16

SEMESTER VII

ELEC 386	Electronic Communications II	3
ELEC 416	Microelectronics Circuit Design	3
SOET 361	Project Management	3
	Program Elective	3
	Elective (GER 3, 4, 5, 6, 7, 8, 9)	3
		15

SEMESTER VIII

ELEC 477	Capstone Project*	3
ELEC 436	Biomedical Electronics OR	
ELEC 488	Electrical Power Systems	3
ECON 370	Engineering Economics	3
	Program Elective	3
	Elective (GER 3,4,5,6,7,8,9)	3
		15

Suggested Program Electives:

SOET 374 Industrial Management

SOET 349 Industrial Safety and Health

SOET 373 Management Telecommunications

ELEC 405 Satellite Communications

ELEC 375 Fiber Optic Communications

PHYS 301 Introduction to Photonics

MECH 351 Design of Experiments

AREA 303 Wind Turbines

MECH 342 Thermodynamics

AREA 340 Geothermal Energy

ELEC 355 Embedded Electronics

MATH minor courses: 341, 361, 351, 371, 391

** Fulfills writing intensive requirement*

UL = Upper Level Courses (300/400)

GER = General Education Requirement

Program Electives: Must be from approved list of program electives for the Electrical Technology program or permission of program coordinator.

NOTE: Electrical Engineering Technology students must meet seven of ten General Education Requirements, 45 upper level credits.

Student Learning Outcomes can be found at www.canton.edu/csoet/elec/.

Emergency Management—BS

The Bachelor of Science degree in Emergency Management focuses on the development and education of emergency managers and other administrative personnel with responsibilities in emergency management or the allied homeland security field of study. Students receive education in the mitigation of, preparedness for, response to, and recovery from natural or technological emergencies, disasters and catastrophes.

Students learn emergency management theory and doctrine and how to apply it in simulated disasters. The curriculum follows standard processes for ensuring the preparedness and resilience of communities and organizations.

STUDENTS IN THIS MAJOR:

- Learn about the phases of emergency management (mitigation, preparedness, response, and recovery).
- Analyze past disasters and examine effectiveness of the current approaches to emergency management.
- Learn about natural and technological hazards, develop hazard and vulnerability assessments, and strategize mitigation solutions.
- Study new and innovative methods for preparing communities and organizations to address the risk of emergencies, disasters, and catastrophes.
- Understand how to assess community and organization resilience to disasters and methods for recovering from disasters.
- Build leadership, communication, decision-making and problem-solving skills through the development and completion of tabletop, functional and full-scale virtual exercises.
- Explore the major legal and liability issues in emergency management and their potential roles in rule-making and policy development.
- Acquire the skills necessary to develop, conduct and evaluate disaster exercises in highly-structured and applied, interactive educational simulations.

CAREER OPPORTUNITIES:

- County and city emergency and disaster management agencies
- Regional and state emergency management and homeland security departments and agencies

- Federal emergency management and homeland security agencies
- Emergency management departments within many Federal agencies
- Private Sector emergency management consulting firms.
- Institutions of Higher Education and secondary school districts
- Hospitals and public health agencies
- Private corporations and businesses, including nuclear power plants
- Criminal justice, firefighting and emergency service agencies

ADMISSION REQUIREMENTS:

- Students must be prepared to take Survey of Math (Math 111) or College Algebra (MATH 121)
- Students must be prepared to take Composition and the Spoken Word (ENGL 101)
- Transfer students must have a minimum 2.0 GPA for admittance to the Emergency Management major and meet specific program requirements for admission.

PROGRAM REQUIREMENTS:

(CURRICULUM 1864)

SEMESTER I	CREDITS
ENGL 101 Composition & the Spoken Word	3
History Elective	3
EADM 201 Fundamentals of Emergency Management	3
ESCI101/102* Intro to Environmental Science + Lab [GER 5])	3
Liberal Arts Elective(Any GER)	3
	16

SEMESTER II

EADM 205 Hazard Assessment and Mitigation.	3
SOCI 101 Introduction to Sociology	3
MATH Math Elective(GER 4)*	3
Liberal Arts Elective (GER 6, 8, 9, 10, 11)	3
Liberal Arts Elective	3
	15

SEMESTER III

EADM 220 Emergency Mgmt. & Response	3
EADM 222 Emergency Planning	3
Science Elective(GER 5)	3
Liberal Arts Elective (GER 3)	3
Liberal Arts Elective (GER 6, 8, 9, 10, 11)	3
	15

SEMESTER IV

EADM 320 Recovery and Resilience	3
JUST 230 Fundamentals of Homeland Security	3
Liberal Arts Elective	3
Liberal Arts Elective	3
General Elective	3
	15

SEMESTER V

BSAD 301 Principles of Management	3
BSAD 305 Public Budgeting & Fiscal Mgmt. OR EADM 310 Emergency Management Finance, Budgets, and Grants	3
EADM 314 Professional Ethics OR	
BSAD 319 Professional Ethics	3
Liberal Arts Electives	3
Liberal Arts Elective	3
	15

SEMESTER VI

EADM 307 Legal Issues in E&D	3
SOCI 325 Sociology of Disaster	3
General Elective	3
Liberal Arts Elective	3
ENGL 315 The Art of the Tale * [GER 8]	3
	15

SEMESTER VII

EADM 400 Incident Management Systems	3
EADM 430 Simulated Disaster Training	3
JUST 429** Introduction to Culminating Experience	1
U/L Liberal Arts Electives	3
U/L Liberal Arts Elective	3
General Elective	3
	16

SEMESTER VIII

EADM 435 Disaster Simulation	3
EADM 485 Emergency Management Case Study	3
EADM 480 Internship EADM	3-9
OR	
UL Program Elective	3
UL General Elective	3
General Elective	3
	15

UPPER LEVEL PROGRAM ELECTIVES:
ALL UPPER LEVEL EADM, JUST, LELM, HSMB, CONS, ECON, BSAD, SSC, CITA AND PSYC COURSES, AND/OR OTHER UPPER-LEVEL COURSES WITH PERMISSION OF INSTRUCTOR.

*MATH 111 OR HIGHER IS REQUIRED-
NOTE: IF YOU ARE ENROLLING IN A COURSE THAT IS A PRE-REQUISITE FOR A REQUIRED COURSE IN YOUR PROGRAM, YOUR TAP ELIGIBILITY MAY BE AFFECTED.

** Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Emergency Management students must meet all ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/business/eadm/.

Finance—BBA

As our society moves to a more service-oriented world, the area of financial services becomes critical to our present and future economic situation. The movement towards blurring of the worlds of business, finance, stock brokerage, bond trades, insurance, banking and retirement planning has produced a tremendous growth industry. SUNY Canton's Finance program puts our graduates on the leading edge of this service industry.

STUDENTS IN THIS MAJOR:

- Receive a solid fundamental education in the areas of business, finance, accounting, and liberal arts.
- Train in many operational areas of financial services.
- Have the opportunity to spend an entire semester in the financial industry.
- Prepare for graduate-level education.

CAREER OPPORTUNITIES:

The employment opportunities cover a broad range of options, including major employers and also entrepreneurship. Graduates are working in:

- Banking
- Insurance
- Credit Unions
- Brokerage Firms
- Financial Planning Firms
- Colleges and Universities

EMPLOYERS OF SUNY CANTON GRADUATES:

- Community Bank
- SEACOMM Federal Credit Union
- SUNY Canton
- North Franklin Federal Credit Union
- North Country Savings Bank
- MetLife

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum 2.0 GPA for admittance to the Finance major and meet specific program requirements for admission.

PROGRAM REQUIREMENTS:

(CURRICULUM 0282)

SEMESTER I CREDITS

ACCT 101	Foundations of Financial Accounting.....	4
ECON 101	Macroeconomics (GER7)	3
ENGL 101	Composition & the Spoken Word (GER 1,2)	3
CITA 110	Intro. to Information Technology	3
FYEP 101	First Year Experience	1
	Mathematics Elective (GER 4)	3-4
		<u>17-18</u>

SEMESTER II

ACCT 102	Foundations of Managerial Accounting.....	3
ECON 103	Microeconomics	3
MATH 141	Statistics	3
BSAD 200	Business Communications.....	3
	Natural Sciences Elective (GER 5)	3-4
		<u>15</u>

SEMESTER III

BSAD 201	Business Law I.....	3
FSMA 210	Introduction to Finance.....	3
	DEISJ Elective.....	3
	General Elective (GER Recommended)	3
	Program ¹ Elective	3
		<u>15</u>

SEMESTER IV

FSMA 220	Introduction to Investments	3
BSAD 301	Principles of Management	3
FSMA 312	Financial Management	3
	GER (6,8,9, or 11)	3
	GER (6,8,9, or 11)	3
		<u>15</u>

SEMESTER V

FSMA/ECON 330	Financial Institution & Market.....	3
ECON 315	Global Economy (GER 10)	3
FSMA 315	Global Investments.....	3
	Program Elective ¹	3
	Program Elective ¹	3
		<u>15</u>

SEMESTER VI

BSAD 319	Professional Ethics	3
BSAD 203	Marketing.....	3
FSMA 415	Global Finance	3
FSMA 420	Financial Derivatives.....	3
	Program Elective ¹	3
		<u>15</u>

SEMESTER VII

FSMA 325	Financial Compliance & Regulation.....	3
FSMA 422	Risk Management.....	3
	Program Elective ¹	3
	Program Elective ¹	3
	U/L Program Elective ²	3
FSMA 429	Orientation to Culminating Exp.....	1
		<u>15-16</u>

SEMESTER VIII

FSMA 480	Finance Internship** OR.....	6-15
FSMA 460	Senior Project OR U/L Program Electives ¹	3-15
		<u>15</u>

¹ Program Electives: Courses in ACCT, AGMT, BSAD, CITA, ECON, ESPT, FSMA, HSMB, LEST and MINS

² Program Electives: Courses in FSMA

*Lowest acceptable level: College Algebra or Survey of Math.

**REMINDER: Pre-req to FSMA 480 or 460 is FSMA 429 (Orientation to Culminating Experience).

Forensic Criminology, B.S.

The four-year, undergraduate Bachelor of Science in Forensic Criminology is an exciting new program which combines a core concentration in criminology with select courses in the forensic sciences. Throughout this program, students explore the complex interplay between theory and practice in the criminal justice system. Applying the scientific method to criminological theory, individuals who complete the program will be prepared to actively investigate the relationship between criminological research and evidence-based practice in the justice system, and will be poised to begin professional work in criminal justice, or for enrollment in graduate work. The program is interdisciplinary, reflecting the wide range of employment and graduate-school opportunities, including: law enforcement, corrections, victim services, juvenile justice, forensic science, and forensic behavioral sciences.

The program requires 3 lower-level core requirements in criminology and the social sciences; 6 upper-level core courses in criminology, forensic science, information management, and research methods; 2 courses from the criminology cluster; and 2 courses from the forensics cluster.

PROGRAM OBJECTIVES

The primary educational objectives of the BS in Forensic Criminology include:

- Exploring a broad range of liberal arts disciplines, and identifying the ways in which these disciplines are interrelated, both in theory and in practical application of theory;
- Demonstrating facility with conventions of academic and professional discourse;
- Analyzing the foundations and evolution of criminological theory;
- Analyzing the foundations and principles of forensic science and criminological practice, including the systems in which these disciplines are found, as well as the prevailing ethical and practical guidelines for practice in these disciplines and systems;
- Identifying systemic issues and problems in contemporary forensic and criminological practice; and
- Applying research and data to current forensic and criminological practice to investigate potential mechanisms for

evidence-based practice to lead change in emerging justice-system reforms.

CAREER OPPORTUNITIES:

- Court positions
- Criminalistics
- Criminal justice researcher
- Research analyst
- Criminal justice policy analyst
- Victim advocacy
- Victim services
- Offender re-entry services
- Rehabilitation services
- Offender programing
- Restorative justice services
- Child protective and social services
- Governmental administration
- Law enforcement, corrections and juvenile justice programming

ADMISSION REQUIREMENTS:

- Refer to the table of high school course prerequisites for admission.
- Students must be prepared to take Survey of Math (MATH 111).
- Students must have a high school average of at least 80.
- Students must be prepared to take ENGL 101 or ENGL 102.
- Transfer students must have a minimum cumulative grade point average of 2.0.

PROGRAM REQUIREMENTS (CURRICULUM 2994)

SEMESTER I	CREDITS
JUST 202 Intro to Forensic Criminology	3
ENGL 101 Composition and the Spoken Word (GER 1/2)	3
PSYC 101 Introduction to Psychology (GER 7) 3	
SOCI 101 Intro to Sociology (GER 7)	3
Liberal Arts Elective (GER 6, 8, 9, 10 or 11).....	3
	15

SEMESTER II	CREDITS
Natural Science (GER 5).....	3
Liberal Arts Elective (Any GER).....	3
SOCI 105 American Social Problems	3
MATH Elective ¹	3
Liberal Arts Elective(GER 6, 8, 9, 10 or 11).....	3
	15

SEMESTER III	CREDITS
SSCI181 General Elective.....	3
JUST 204 Alcohol, Drugs & Society.....	3
Crime and Media	3
Liberal Arts Elective (Any GER)	3
General Elective.....	3
	15

SEMESTER IV	CREDITS
PSYC 275 Abnormal Psychology	3
MATH 141 Statistics	3
DEISJ Elective (GER 3)	3
Liberal Arts Elective.....	3
General Elective.....	3
	15

SEMESTER V	CREDITS
JUST 310 Causes of Crime	3
U/L Liberal Arts Elective	3
Criminology Cluster Elective ⁱⁱ	3
Forensics Cluster ⁱⁱⁱ	3
U/L Liberal Arts Elective	3
	15

SEMESTER VI	CREDITS
JUST 426 Ethics in Forensic Science & Administration of Justice.....	3
Forensics Cluster ⁱⁱⁱ	3
U/L Liberal Arts Elective	3
U/L Liberal Arts Elective	3
General Elective.....	3
	15

SEMESTER VII	CREDITS
JUST 349 Vulnerable Populations in Criminal Justice.....	3
JUST 347 Research Methods Criminology.....	3
JUST 302 Information Management in Criminal Justice.....	1
Criminology Cluster Elective ⁱⁱ	3
U/L Liberal Arts Elective	3
General Elective.....	3
JUST 429 Intro To Culminating Experience	1
	16

SEMESTER VIII	CREDITS
JUST 432 Senior Seminar (Capstone) ^{iv}	3
JUST 430 Culminating Experience in CJ OR	3-12
U/L Program Elective	3
Program Elective.....	3
Program Elective.....	3
Program Elective.....	3
	15

i Must be MATH 111 or higher

ii Criminology Cluster: Select from JUST 307, JUST 311, JUST 313, JUST 316, JUST 322, JUST 323, JUST 324, JUST 327, JUST 331, JUST 339, JUST 340, JUST 345, JUST 350, JUST 351, JUST 404, JUST 421, or JUST 441

iii Forensics Cluster: Select from JUST 300, JUST 301, JUST 303, JUST 320, JUST 330, JUST 346, JUST 370, JUST 402, JUST 410, JUST 411, JUST 412, JUST 423, JUST 422, JUST 424 or JUST 485

iv Writing Intensive Course

NOTE: Forensic Criminology students must meet seven of the ten General Education Requirements and successfully complete the SUNY Canton computer competency requirement.

Funeral Services Administration—B. Tech.

The Bachelor of Technology degree in Funeral Services Administration is open to new students, transfer students and funeral directors who have passed the National Board Examination and are licensed. This is the only bachelor's degree in Funeral Services Administration in New York State and one of only a few in the country.

STUDENTS IN THIS MAJOR:

- Participate in classes, Practicums, and Internships that provide theoretical education as well as practical training and experience in all phases of the funeral service profession including embalming, funeral directing, funeral customs and traditions, and restorative Art.
- Are eligible to take the National Board Examination required for licensure.
- Experience a learning environment that is rigorous yet supportive and flexible.
- Can concentrate elective courses in their field of interest such as business, coroner preparation, or Human Services.
- Will be involved in online and on campus courses.
- Online learning students must attend a 4-day residency, on campus, in their senior year of Instruction. STUDENTS MUST ATTEND THE SESSION IN ITS ENTIRETY.

ACCREDITATION:

The Funeral Services Administration Bachelor's Degree program at State University of New York - Canton is accredited by the American Board of Funeral Service Education (ABFSE), 992 Mantua Pike, Suite 108, Woodbury Heights, NJ 08097 (816) 233-3747. Web: www.abfse.org.

National Board Examination pass rates, graduation rates, and employment rates for this and other ABFSE-accredited programs are available at www.abfse.org. To request a printed copy of this program's pass rates, go to the office of the FSAD Program Director, Cook 109 or by email at penepentd@canton.edu, or by telephone 315-386-7170.

CAREER OPPORTUNITIES:

- Funeral Director
- Embalmer
- Funeral Home Manager/Owner
- Pre-need Funeral Counselor in a funeral home or with specialized pre-need companies
- Funeral Service After Care Specialist
- Educator in Funeral Services /Mortuary Science

- Cemetery Administration
- Allied Professions such as cemeteries, crematories, morgues, coroners, and medical examiners offices, organ and tissue banks, teaching funeral service, and funeral supply sales such as caskets, vaults, embalming fluids, computer software companies.

B-TECH COMPLETION PROGRAM FOR LICENSED FUNERAL DIRECTORS:

Graduates from an accredited ABFSE mortuary science program and who have passed both sections of the National Board Exam are eligible for the B-Tech Completion program. Admissions and graduation requirements apply. Up to 30 credits may be obtained through challenge exams and/or from life experience credits.

ADMISSION REQUIREMENTS:

- Students must be eligible for enrollment in Composition and the Spoken Word (ENGL 101).
- Students must be eligible for enrollment in Intermediate Algebra (MATH 106) or higher.
- Transfer students must have a minimum 2.0 GPA.
- Blue Card requirements, see website under Program Description.

PROGRAM REQUIREMENTS (CURRICULUM 0152)

SEMESTER I

BIOL 101	Intro to Biology.....	4
BSAD 100	Intro to Business.....	3
ENGL 101	Composition & Spoken Word.....	3
FSAD 111	Study of Funerals: Past & Present	3
PSYC 101	Intro to Psychology.....	3
FSAD 101	Introduction to Funeral Services +...1	17

SEMESTER II

BSAD 201	Business Law I	3
CITA 110	Intro to Information Technology	3
MATH 106	Intermediate Algebra OR	
MATH 141	Statistics (Any GER 4).....	3
	English/Humanities Elect (GER 6)....	3
	Social Science Elective (GER 7).....	3
		15

SEMESTER III

FSAD 245	Accounting and Technology for Funeral Services *	3
SSCI 315	Death, Dying & Bereavement	3
FSAD 115	Thanatochemistry *	2

FSAD 308	Introduction to the Clinical Exp.....	1
	Liberal Arts Elective	
	(GER 8, 9, 10, 11)	3
	General Elective (GER)	3
		15

SEMESTER IV

BIOL 207	Human Anatomy*	4
FSAD 121	Analytical Embalming Tech.* +	2
FSAD 252	Embalming Lab I+	1
FSAD 129	Clinical Practicum	2
FSAD 225	Professional Funeral Practice*	3
	Liberal Arts Elective	
	(GER 8, 9, 10, 11)	3
		15

SEMESTER V

FSAD 205	Mortuary Hygiene *	3
FSAD 211	Embalming & Asep. Tech*+	3
FSAD 253	Embalming Lab II+	1
FSAD 214	Funeral Home Management I*	3
	General Elective.....	3
	U/L Liberal Arts Elective	
	(GER 8, 9, 10, 11)	3
		16

SEMESTER VI

FSAD 307	Human Response to Death*	4
	DEISJ Elective (GER 3)	3
FSAD 322	Funeral Home Management II*	3
HLTH 303	Occupational Health & Safety.....	3
	UL Management, Social Science or Health Elective	3
		16

SEMESTER VII

FSAD 406	Bereavement Counseling*	3
FSAD 420	Current Issues in Funeral Service*#	3
FSAD 440	Internship in Funeral Service	7
	UL General Elective	3
		16

SEMESTER VIII

FSAD 321	Advanced Embalming*	3
FSAD 323	Restorative Art*	4
FSAD 401	Funeral Service Law*	3
FSAD 445	Mortuary Compliance**	2
		12

Fulfills Writing Intensive Requirement.

* A final course grade of C or better is needed to meet FSAD graduation requirements

** A final course grade of 85% or better is required in order to pass this course

+ This course can only be repeated once

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

—"C" or better is required in all FSAD courses and core courses. Students who have taken Mortuary Compliance (FSAD 445) more than 1 year prior to completing requirements in the major, will be required to repeat this course and earn a C or better to be eligible for the NBEs. Once enrolled in the FSAD program, students must complete the program within six years. For extraordinary situations, permission to complete beyond 6 years must be granted by the FSAD Director.

NOTE: Funeral Services Administration students must meet seven of the ten General Education Requirements and 30 total liberal arts credits.

Student Learning Outcomes can be found at www.canton.edu/sci_health/fsad/outcomes.html.

Game Design & Development—BS

The Bachelor of Science in Game Design and Development is a comprehensive program focusing on the design and development of modern video games. Courses in the Bachelor of Science in Game Design and Development program provide a focus on video game design and development, imaginary storytelling, and production needs of the modern gaming industry. Graduates of the Game Design program will have hands-on skills to pursue a career creating content for everything from home computers and mobile devices, to emerging platforms like cloud gaming.

STUDENTS IN THIS MAJOR:

- Students will learn the most recent technologies and programming skills to create video games on multiple platforms and devices.
- They will learn the theories and fundamentals of the game development life cycle, such as prototyping, producing, designing, programming, level creation, art production, and testing.
- Through this program, students will gain a high degree of hands-on experience with the design and development of modern video games.
- They will also receive intensive training in developing and applying an algorithmic approach to problem solving through using structure and object-oriented programming techniques, as well as designing and building gaming databases.
- Throughout the program, students will collect samples of their work and create a professional portfolio used in pursuing a job in gaming and other interactive entertainment industry.

CAREER OPPORTUNITIES:

- Game programmers
- Computer graphics and visualization developers
- Virtual reality and augmented reality software engineer

- Modelers
- Animators
- Digital content producers
- Level designers
- Texture mappers

CAREER OUTLOOK

Employment of gaming software developer, computer graphics and virtual reality engineer, multimedia artists and animators, is projected to grow 6 percent from 2014 to 2024. Projected growth will be due to increased demand for animation and visual effects in video games, movies, and television, according to the U.S. Department of Labor Bureau of Labor Statistics. The median pay scale for these positions was \$63,970 per year.

ADMISSION REQUIREMENTS:

- Refer to the table of high school course prerequisites for admission.
- Students must be prepared to take ENGL 101 Composition and the Spoken Word.
- Transfer students must have completed a college level English course.
- Transfer students to this program must have a 2.0 GPA for admission.
- Transfer students from other institutions and majors have to complete certain bridge courses that could extend their graduation rate.

PROGRAM REQUIREMENTS:

(CURRICULUM 2638)

SEMESTER I	CREDITS
CITA 152 Computer Logic	3
ENGL 101 Composition and the Spoken Word (GER 10)	3
GAME 110 Fundamentals of Game Design.....	3
GMMD 101 Intro to Media Studies.....	3
MATH Elective.....	3
FYEP 101 First Year Experience.....	1
	<u>16</u>

SEMESTER II	CREDITS
CITA 180 Intro to Programming	4
ENGL 202 Creative Non-Fiction.....	3

GAME 230 3D Character Modeling.....	3
SOCI 101 Intro to Sociology.....	3
MATH Elective - Min. MATH 121	4
	<u>16</u>

SEMESTER III	CREDITS
CITA 215 Database Apps and Concepts.....	3
ENGL 221 Creative Writing	3
GAME 130 Game Design and Prototyping	3
GER - Natural Science	3
GER Elective - Any	3
	<u>15</u>

SEMESTER IV	CREDITS
GAME 210 Object-Oriented Design for Game Development.....	3
GAME 240 3D Environments for Games.....	3
GER Elective - Any	3
GER - DEISJ	3
Elective Liberal Arts.....	3
	<u>15</u>

SEMESTER V	CREDITS
CITA 342 Visual Programming.....	3
ENGL 301 Professional Writing.....	3
GAME 250 Game Mechanics and Dynamics.....	3
Liberal Arts Elective.....	3
U/L Elective - GAME/GMMD/ TCOM.....	3
	<u>15</u>

SEMESTER VI	CREDITS
CITA 204 System Analysis Design	3
ENGL 315 Short Fiction: The Art of the Tale	3
GMMD 432 Virtual Worlds.....	3
Liberal Arts Elective.....	3
U/L Elective - GAME/GMMD/ TCOM.....	3
	<u>15</u>

SEMESTER VII CREDITS	
GAME 330 Web Design & Development.....	3
GAME 390 GAME Capstone I	1
GAME 450 Mobile Game Development	3
GMMD 420 Animation Techniques	3
U/L Liberal Arts Elective.....	3
U/L Liberal Arts Elective.....	3
	<u>16</u>

SEMESTER VIII CREDITS	
GAME 470 Emerging Gaming Applications.....	3
GAME 490 GAME Capstone II	3
GMMD 317 Culture and Communication	3
U/L Liberal Arts Elective	3
U/L Liberal Arts Elective	3
	<u>15</u>

* *Fulfills writing intensive requirement.*

UL = *Upper Level Courses (300/400)*

GER = *General Education Requirement*

Graphic and Multimedia Design—BS

The Bachelor of Technology in Graphic and Multimedia Design (GMMD) is a fast paced technology and culture driven major for creative students interested in pursuing a four-year degree. Students can also expect to learn about mobile and social media, and other new forms of communication.

STUDENTS IN THIS MAJOR:

- Create and design original works using graphics, video, photography, sound, and animation.
- Develop communications skills, management skills, and analytical skills.
- Learn design theory and interact with the latest multimedia authoring software.
- Design and launch their own multimedia project individually, as part of a team, and/or complete an internship within the media field.

CAREER OPPORTUNITIES:

- Graphic designer
- Web designer
- Advertising specialist
- Public Relations specialist
- Video/Sound/or Video Game designer
- Journalist

POTENTIAL EMPLOYERS

- Web Design Firms
- Advertising Firms
- Government
- Education
- News Agencies
- Other (design departments)

ADMISSION REQUIREMENTS:

- Prepared to take Expository Writing (ENGL 101)
 - NYS English Regents score ≥ 75 ; or
 - Verbal SAT score ≥ 420 ; or
 - Reading and Writing ACT scores ≥ 17 ; or
 - Transfer student who has already passed a college level English course.
- Transfer students from other institutions and majors may have to complete certain bridge courses that could extend their graduation date.

PROGRAM REQUIREMENTS:

(CURRICULUM 2026)

SEMESTER I	CREDITS
GMMD 101 Intro to Media Studies.....	3
ARTS 101 Intro to Drawing OR	
GMMD 102 Intro to Design.....	3
ENGL 101 Composition & The Spoken Word...	3
CITA 152 Computer Logic.....	3
GER - Social Science.....	3
	15
SEMESTER II	
ARTS 101 or GMMD 102	3
GMMD 112 Intro. to Time-Based Media.....	3
ENGL/TCOM Elective.....	3
HUMA189/SPCH104/GAME110/ BSAD100/CITA180.....	3
MATH 111/121.....	3
	15

SEMESTER III

GMMD 200 Digital Photography	3
ARTS 201 Art History BCE to 16th Century **	3
GMMD 240 Professional Practices.....	3
GER - Natural Science and Scientific Reasoning.....	3-4
GER -Diversity: Equity, Inclusion, and Social Justice.....	3
	15-16

SEMESTER IV

GMMD 211 Film Analysis.....	3
GMMD 317 Culture and Communication	3
ARTS 202 Art History 16th-20th Centuries.....	3
GMMD Elective	3
General Elective.....	3

SEMESTER V

GMMD 313 Studies in Genre Film.....	3
GER - Diversity: Equity, Inclusion, and Social Justice.....	3
ENGL/TCOM Elective.....	3
UL GMMD/ARTS Elective	3
GMMD/CITA Elective.....	3
GMMD Elective	3
	18

SEMESTER VI

ENGL 301 Professional Writing.....	3
Upper Level Elective.....	3
Upper Level Elective.....	3
GMMD Elective	3
GMMD Elective	3
	15

SEMESTER VII

GMMD 401 Multimedia Product Design	3
GMMD 404 Advanced Design Practices	3
GMMD Elective	3
GMMD Elective	3
Upper Level Liberal Arts Elective ...	3
	16

SEMESTER VIII

GMMD 444 Multimedia Product Design 2	4
Upper Level Elective.....	3
GMMD Elective	3
Arts Management Internship or	
Upper Level Electives.....	3-4
	13

**Program Elective*

***Writing Intensive Course*

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

Student Learning Outcomes can be found at <https://www.canton.edu/csoet/gmmd/>.

Health & Fitness Promotion—B. Tech.

The fitness industry continues to grow as the benefits of good health and exercise become more evident in our society. Fitness is no longer reserved for the elite athlete, but is important for all of society as a means of disease prevention and longevity. Students who complete the bachelor program in Health and Fitness Promotion may pursue employment in settings that promote health and wellness including fitness centers, corporate fitness facilities, as personal trainers, as strength and conditioning coaches with athletic teams, community health, and health organizations. Once enrolled in the program, students have three tracks to choose from to best meet their career goals: science, business, or physical therapy assistant.

The science track is designed for students who plan on pursuing graduate level studies in physical therapy, occupational therapy, chiropractic, athletic training, or physician's assistant. If a student is interested in physician's assistant, they may also be required to take additional science and math course work that may not be included in this program, such as organic chemistry, microbiology, genetics, and calculus. This is best discussed with the student's advisor.

The business track is designed for students who are interested in handling the day-to-day business operations of a fitness facility in addition to their personal trainer or strength and conditioning duties. These students are more interested in helping run a facility or perhaps owning their own business or facility. The business track will provide students with fundamental courses in business and management which should serve to prepare them for business ownership or positions of management in the field.

The physical therapy assistant track is designed for students who have already obtained a two-year PTA degree and wish to complement their physical therapist assistant training with further knowledge in exercise and fitness, or who wish to pursue a Doctor of Physical Therapy Degree after obtaining their bachelor's in Health and Fitness Promotion.

All tracks provide students with a core foundation in health promotion and fitness. Students will be able to choose from specialized electives with an emphasis on exercise and sports. Students also have the opportunity to pursue an internship in an area of their interest.

CAREER OPPORTUNITIES:

- Graduates of the program may pursue employment in settings that promote health and wellness including fitness centers, corporate fitness facilities, as personal trainers,

as strength and conditioning coaches with athletic teams, and community and health organizations.

GRADUATE STUDY

OPPORTUNITIES:

- Doctor of Physical Therapy (DPT) programs
- Master of Science in Athletic Training
- Doctor of Chiropractic (DC)
- Master of Science in Occupational Safety and Health
- Master of Science in Physician Assistants Studies
- Master of Science in Occupational Therapy
- Occupational Therapy Doctorate (OTD)
- Master of Science in Kinesiology
- Master of Science in Exercise Science
- Master of Science in Community Health
- Master of Science in Therapeutic Recreation
- Master of Science in Human Performance

ADMISSION REQUIREMENTS:

- Students must have prerequisites to enroll in a GER Math course and ENGL 101.

PROGRAM REQUIREMENTS:

(CURRICULUM 2254)

SEMESTER I

HEFI/HLTH/PTA/BSAD Program Elective	3
BIOL 217 Anatomy & Physiology I	4
ENGL 101 Composition & Spoken Word	3
PSYCH 101 Introduction to Psychology	3
GER/Liberal Arts Elective (6, 8, 9, 10, 11)	3
	16

SEMESTER II

HEFI/HLTH/PTA/BSAD Program Elective	3
BIOL 218 Anatomy & Physiology II	4
GER Math*	3-4
DEISJ Elective	3
GER/Liberal Arts Elective (6, 8, 9, 10, 11)	3
	16-17

SEMESTER III

HEFI/HLTH/PTA/BSAD Program Elective	3
PSYC 225 Human Development	3
ACCT 101 Founds. of Financial Accounting OR PHYS 121 & 125 Or College Physics I & Lab	4
General Elective	3
General Elective	3
	16

SEMESTER IV

HEFI/HLTH/PTA/BSAD	
Program Elective	3
HEFI 203 Motor Development OR	
PTA 103 Neuromuscular Pathologies	3-4
PTA 102 Kinesiology OR	
HEFI 300 Biomechanics	3
BSAD 201 Business Law I OR	
PHYS 122 & 126 College Physics II & Lab	3-4
General Elective	3
	15-17

SEMESTER V

HEFI 303 Exercise Physiology	3
CHEM 150 College Chemistry I OR	
BSAD 301 Principles of Management	3-4
MATH 141 Statistics	3
General Elective	3
General Elective U/L if needed	3
	15-16

SEMESTER VI

CHEM 155 College Chemistry II OR	
SPMT 312 Sports Entrepreneurship	3-4
HEFI 401 Fitness Assessment and Exercise Prescription	4
HEFI 375 Fitness and Sports Nutrition	3
HEFI 405 Current Issues in Health &	3
Fitness (WI)**	
General Elective U/L if needed	3
	16-17

SEMESTER VII

HEFI 402 Strength and Conditioning	3
HEFI 406 Orientation to Culminating Exp.	1
HEFI 404 Organization and Administration in Health and Fitness Professions	3
U/L Program Elective	3
U/L Program Elective	3
	12

SEMESTER VIII

HEFI 407 Health & Fitness Internship AND/OR U/L Program Electives	12-15
	12-15

* Students who wish to pursue the science track or are planning to pursue a DPT or wish to take Physics must take College Algebra (Math 121) for their required GER math.

** Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

Program Electives: BIOL 310, The Genome, BIOL 325 Biology and Society, BIOL 335 Pathophysiology, HEFI 310 Advanced Care and Prevention of Athletic Injuries, PSYC 320 Psychology of Health, HLTH 303 Occupational Health & Safety, SSCI 370 Research Methods in the Social Sciences, HEFI 403 Community Wellness, HEFI 408 Exercise Prescription for Special Populations, HEFI 409 Applied Exercise Prescription, HEFI 410 Applied Strength & Conditioning, SOCI 320 Sociology of Health, Illness & Healthcare, SPMT 306 Sports Operations and Facilities Management, SPMT 330 Psychology of Sport and Exercise, SSCI 315 Death, Dying and Bereavement

NOTE: Health & Fitness Promotion students must take seven out of ten General Education Requirements including one and ten, and 30 total General Education credits.

Student Learning Outcomes can be found at www.canton.edu/sci_health/hefi/.

Health Care Management—B.S.

Health Care Management is a Bachelor of Science degree, which includes study in health, science, business and management. Students will be prepared to enter public and private sector health care jobs with theoretical and practical skills necessary for a challenging lifelong career in an ever-changing technological society.

STUDENTS IN THIS MAJOR:

- May start as a freshman or transfer credits from another discipline for advanced standing in the major.
- May take asynchronous online courses and thus attendance in Canton will not be necessary.
- Will have internship opportunities in the last semester of study.
- Will have a diverse background in health sciences, health care management and business management upon completion of the program.

CAREER OPPORTUNITIES:

- Upward mobility in management of allied health fields
- Public and private health service careers
- Long-term care administration
- Medical practice management
- Business sector jobs in administration within industry, education, government as well as health care

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum GPA of 2.0.

PROGRAM REQUIREMENTS:

- All students will complete a minimum of 120 credits, maintaining a GPA of 2.0.
- To advance to junior level status students will complete 60 credits, maintaining a GPA of 2.0.

- Course work from certificate and associate degree programs may be accepted to permit advanced standing.
- To maintain junior and senior level status and to advance to the final semester, all students must maintain a GPA of 2.0.

(CURRICULUM 0253)

SEMESTER I CREDITS

HSMB 101	Intro. to Health Care Mgmt.	3
ENGL 101	Basic Communication (GER 1,2)	3
	Liberal Arts and Science Elective	3
	GER (6,8,9,10, or 11)	3
PSYC 101	Introduction to Psychology (GER 7) ..	3
FYEP 101	First Year Experience.....	1
		<u>16</u>

SEMESTER II

ECON 101	Macroeconomics	3
HSMB 316	Equity, Diversity, and Cultural Competence in Healthcare	3
SOCI 101	Introduction to Sociology	3
	GER (6,8,9,10, or 11)	3
MATH 141*	Statistics (GER 4)	3
		<u>15</u>

SEMESTER III

ACCT 101	Foundations of Financial Acct.	4
	Science Elective (GER 5)	3-4
HLTH 200	Medical Terminology of Disease OR	
HSMB 200	Medical Terminology.....	3
	Liberal Arts and Sciences Elective	3
		<u>13-14</u>

SEMESTER IV

HSMB 304	U.S. Health Care System	3
	General Elective.....	3
	U/L Liberal Arts & Sci. Elective	3
	GER (6,8,9,10, or 11)	3-4
	General Elective.....	3
		<u>15-16</u>

SEMESTER V

HSMB 301	Public Health Issues.....	3
HSMB 306	Health Care Financing.....	3
	Liberal Arts and Sciences Elective	3
	Liberal Arts and Sciences Elective	3
	U/L Liberal Arts and Sciences Elective.....	3
		<u>15</u>

SEMESTER VI

HSMB 305	Managed Care	3
ECON 310	Economics of Healthcare.....	3
HSMB 307	Health Care Facility Admin.	3
	Liberal Arts and Sciences Elective	3
	Liberal Arts and Sciences Elective	3
		<u>15</u>

SEMESTER VII

HSMB 308**	HSMB Internship Orientation	1
BSAD 340***	Management Communications*	3
	Liberal Arts and Sciences Electives....	3
HSMB 302***	Legal and Ethical Issues in Health..	3
HSMB 310	Quality and Patient Safety	3

U/L Liberal Arts and Sciences

Elective3
16

SEMESTER VIII

HSMB 410	Senior Seminar	3
HSMB 408	Internship (3-12) AND/OR up to 4 program electives for a total of 12 credits	
	U/L program elective.....	3
	General Elective.....	3
	General Elective	3
	General Elective	3
		<u>15</u>

Total Credits: 120-122

Program Electives: ACCT, BIOL, BSAD, CHEM, CITA, CYBR, select PSYC courses, DHYG, EADM, ECON, FSAD, FSMA, HEFL, HLTH, HSMB, LEST, MINS, NURS, PHTA, VSCT, VSAD. Program must meet 7 of 10 General Education Requirements and 30 total GER credits.

Acceptable PSYC courses as program electives:

PSYC 225 (Human Development), PSYC 275 (Abnormal), PSYC 308 (Personality), PSYC/SSCI 310 (Counseling Theories), PSYC 340 (Social), HUSV 305 (Ethics), PSYC 315 (Crisis Intervention), PSYC 406 (Workplace), HUSV 310 (Working in Human Services Agencies), HUSV 315 (Mental Health Practice), SSCI 370 (Research Methods), and PSYC 320 (Health Psychology).

*Students must meet the pre-requisite for MATH 141 Statistics

**This course is only required for students intending to enroll in HSMB 408, Internship in the 8th semester.

***Writing Intensive

Homeland Security—*B. Tech.*

The Homeland Security program provides students with a combination of theory and practical skills in the subject area as well as offering a solid grounding in the broader justice system. As a result, students will understand the importance of the impact of technology, human resources and other organizational constraints on homeland security strategies confronting both the public and private sector.

STUDENTS IN THIS MAJOR:

- Receive advanced training in identifying, protecting and responding to threats in both the public and the private sectors in the post-USA PATRIOT Act society.
- Are familiarized with immigration law and issues related to civil liberties while involved in intelligence operations.
- Receive the same certification in the Incident Command System/National Incident Management System as our nation's first responders.
- Individualize their final semester by either completing an internship with a criminal justice agency or completing five upper level criminal justice courses.

CAREER OPPORTUNITIES:

- FBI
- U.S. Border Patrol
- U.S. Coast Guard
- U.S. Department of Homeland Security's Immigration and Customs Enforcement (ICE)
- U.S. Drug Enforcement Administration
- U.S. Marshal's Service
- U.S. Secret Service
- International Criminal Police Organization (Interpol)
- Transportation Security Administration
- Criminal & Intelligence Analysis

- Private Sector Security/Domestic Infrastructure Security

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106).
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have a minimum cumulative grade point average of 2.0 or above.

Recommended preparatory courses or their equivalents are:

JUST 101	Introduction to Criminal Justice
JUST 105	Correctional Philosophy
JUST 110	Criminal Law
JUST 111	Criminal Procedure
JUST 209	Law Enforcement Communications OR BSAD 200, Business Communications
MATH 111	Survey of Mathematics OR
MATH 121	College Algebra

PROGRAM REQUIREMENTS

(CURRICULUM 2335):

SEMESTER I	CREDITS
JUST 101 Introduction to Criminal Justice.....	3
ENGL 101 Composition and the Spoken Word..	3
MATH 111 or Higher.....	3
PSYC 101 Introduction to Psychology.....	3
CITA 110 Intro to Information Technology.....	3
	15

SEMESTER II

JUST 230 Fundamentals of Homeland Security	3
JUST 112 Criminal Law and Procedure.....	3
SOCI 101 Introduction to Sociology.....	3
Natural Science w/ Lab (GER 5)	4
Humanities Elective (GER 6)	3
	16

SEMESTER III

JUST 201 Critical Issues in Criminal Justice **.	3
JUST 232 Intelligence Analysis	3
JUST 204 Crime and Media	3
American History Elective (GER 9).....	3
General Elective.....	3
	15

SEMESTER IV

JUST 233 Crime Analysis	3
General Elective.....	3
General Elective.....	3
Liberal Arts Elective (Any GER)	3
Liberal Arts Elective (Any GER)	3
	15

SEMESTER V

JUST 326 Threats to Homeland Security	3
JUST 375 Global Terrorism: 20th Century to Present.....	3
JUST 380 Civil Liberties & Homeland Security	3
General Elective.....	3
General Elective.....	3
	15

SEMESTER VI

JUST 314 Ethics in Criminal Justice	3
LEST 375 Immigration Law & Border Control	3
JUST 355 Public Safety Incident Response	3
U/L Program Elective	3
General Elective.....	3
	15

SEMESTER VII

JUST 415 Emerging Issues in Homeland Security.....	3
JUST 425 Intelligence Research & Analysis.....	3
JUST 429 Intro. to Culminating Experience	1
U/L Program Elective	3
General Elective.....	3
General Elective.....	3
	16

SEMESTER VIII

JUST 430 Culminating Experience in Criminal Justice OR (5) U/L Program Electives	15
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* MATH 111 or higher is required – NOTE: If you are enrolling in a course that is a pre-requisite for a required course in your program, your TAP eligibility may be affected.

** Writing intensive course.

1. UL Program Electives are selected from JUST or LEST (300-400) level courses

2. This course is only required for students intending to take JUST 430, Culminating Experience, in the 8th semester

Student Learning Outcomes can be found at www.canton.edu/sci_health/home/.

Industrial Technology Management—B. Tech.

The Industrial Technology Management (ITM) curriculum provides students with the opportunity to blend technical interests with management and leadership aspirations. This academic program is ideal for students seeking to build upon a background in engineering technology (e.g. electrical, mechanical, civil, or construction) with an emphasis on developing abilities for project management, systems thinking, managerial skills, entrepreneurship, and business development.

STUDENTS IN THIS MAJOR:

- Have a specialization in an engineering discipline.
- Are able to plan and manage technical projects.
- Are prepared to contribute to business development activities such as product development, operational support, technical marketing, and production management.
- Develop skills to function in and lead a team based effort.
- Are able to communicate in an organized manner through technical reports in written, oral, and other formats appropriate to their careers.

CAREER OPPORTUNITIES:

Employment opportunities are broad and span the range of industry and commerce. Opportunities in this market include:

- Manufacturing and quality control
- Operations management
- Logistics
- Field managers
- Planning and scheduling
- Project engineers or managers

ADMISSION REQUIREMENTS:

Incoming students will meet all gen-

eral admission requirements as freshmen to SUNY Canton and be prepared to take College Algebra (MATH 121). Transfer students will be evaluated individually by the program academic advisor and must have a minimum GPA of 2.0.

PROGRAM REQUIREMENTS:

(CURRICULUM 0935)

SEMESTER I CREDITS

ENGL 101	Composition and Spoken Word	3
MATH 121 or MATH 123	College Algebra or Pre-Calculus	4
PHYS or CHEM	Physics or Chemistry ⁶	4
	Program Elective ¹	3
	Program Elective ¹	3
		<u>17</u>

SEMESTER II

ACCT 101	Foundations of Financial Accounting OR	
ACCT 104	Survey of Accounting	4
PHYS or CHEM	Physics or Chemistry ⁶	4
MATH 161	Calculus	4
	Program Elective ¹	3
	Program Elective ¹	3
		<u>18</u>

SEMESTER III

ECON 103	Microeconomics OR	
ECON 101	Macroeconomics	3
MATH 141	Statistics	3
	Program Elective ¹	3
	Program Elective ¹	3
	GER ³	3
		<u>15</u>

SEMESTER IV

BSAD 201	Business Law I	3
	Program Elective ¹	3
	Program Elective ¹	3
	GER ³	3
		<u>15</u>

SEMESTER V

BSAD 340	Management Communications*	3
SOET 361	Project Management	3
	Program Elective ¹ (U/D)	3
	Program Elective ¹	3
	Track Elective ²	3
		<u>15</u>

SEMESTER VI

BSAD 301	Principles of Management	3
ECON 370	Engineering Economics	3
	Program Elective ¹	3
	Track Elective ²	3
	Liberal Arts/Science (U/D)	3
		<u>15</u>

SEMESTER VII

BSAD 449	Strategic Policies & Issues	3
SOET 377	Engineering Ethics	1
SOET 430	Systems Analysis	3
	Program Elective ¹ (U/D)	3
	Track Elective ² (U/D)	3
	Liberal Arts/Science (U/D)	3
		<u>16</u>

SEMESTER VIII

SOET 348	Engineering Safety	1
SOET 477	Engineering Capstone Project	3
	Business Elective ³ (U/D)	3
	Track Elective ² (U/D)	3
	Track Elective ² (U/D)	3
		<u>13</u>

* *Fulfills writing intensive requirement.*

L/L = Upper Level Courses (100/200).

U/L = Upper Level Courses (300/400).

GER = General Education Requirement.

NOTES:

1 Program electives selected from ACHP, AREA, BSAD, ENGS, CITA, CONS, CYBR, ELEC, GMMD, MATH, MECH, MKTX, PHYS, SOET designators.

2 A Track is required and is one of the following:

Logistics Track Required: BSAD 400 Operations/ Production Management, SOET/BSAD 421 Six Sigma and Lean Manufacturing, GMMD 337 Design Thinking, CITA 325 Intelligence Business Software or CITA 371 Working With Data Visualization Tools

Quality Control Track Required: MECH 350 Quality Improvement, MATH 341 Statistics II, SOET/BSAD 421 Six Sigma and Lean Manufacturing, MECH 351 Design of Experiments

3. General Education Requirements are shown below:

GER Elective Course must come from the following list:

Complete 8 of 11 GER's and 30 total credits

GER 1 Communication (Written)

GER 2 Communication (Oral)

GER 3 Diversity

GER 4 Mathematics

GER 5 Natural Science

GER 6 Humanities

GER 7 Social Science

GER 8 Arts

GER 9 US History and Civic Engagement

GER 10 World History and Global Awareness

GER 11 World Languages

GER's: 1, 2, 3, 4, 5, 7

4. A business elective (U/D) is an elective from business school upper division courses.

5. Minimum mathematics requirement is MATH 121 College Algebra or MATH 123 Pre-Calculus Algebra, or equivalent.

6. Physics or Chemistry Electives can be chosen from PHYS 121&125, PHYS 122&126, PHYS 131&135, PHYS 132&136, CHEM 150, CHEM155, or equivalent.

Student Learning Outcomes can be found at www.canton.edu/csoet/itm/.

Information Technology—B. Tech.

The Bachelor of Technology (B.Tech) degree in Information Technology (IT) prepares students for careers in computer systems, networking, and communications. Graduates gain the knowledge and hands-on experience necessary for roles in system and network administration, systems analysis, IT support, and web and application development. The program emphasizes practical learning to equip students with the skills needed to succeed in a wide range of in-demand technology fields. The courses are offered on-campus, online, or in a hybrid format, providing flexible options that accommodate each student's individual circumstances.

STUDENTS IN THIS MAJOR:

- Gain extensive hands-on experience in computer hardware, networking, security, web development, and IT applications using multiple platforms.
- **Hands-On, Real-World Learning:** Gain practical experience using well-equipped, on-site, and remotely accessible campus computers.
- **Development of Professional Skills:** Emphasis on teamwork and effective communication, essential in today's IT environments.
- **Flexible Degree Options:** A variety of electives available for both on-campus and online study.
- Complete a required Capstone Project and have the option to pursue an internship for real-world experience.

CAREER OPPORTUNITIES:

- System Analyst
- IT Consultant
- System Administrator
- Network Administrator
- Database Manager
- Web Master
- IT Security Specialist
- IT Position in any industry

POTENTIAL EMPLOYERS:

- Information technology departments within private corporations
- Healthcare organizations and hospital systems
- Manufacturing and engineering firms
- Financial institutions and insurance companies
- Retail and e-commerce businesses
- Government agencies at the local, state, or federal level

- Colleges, universities, and K–12 school districts
- IT consulting and managed service providers
- Nonprofit organizations and community service agencies
- Military and defense-related organizations

ADMISSION REQUIREMENTS:

- Applicants should demonstrate readiness for Intermediate Algebra (MATH 121) and Composition and the Spoken Word (ENGL 101). Incoming freshmen will be assessed for appropriate placement in English and math courses.
- High school computer coursework is beneficial but not required for admission.
- Transfer applicants must have a minimum cumulative GPA of 2.0.
- Meeting all prerequisites is recommended; however, applicants who do not meet them may still be admitted. In such cases, additional coursework may be required, potentially extending the program beyond four years.

PROGRAM REQUIREMENTS: *

(CURRICULUM 2045)

SEMESTER I	CREDITS
BSAD 100 Introduction to Business.....	3
CITA 163 Survey of Information Tech.	3
CITA 152 Computer Logic	3
ENGL 101 Composition & Spoken Word.....	3
Mathematics Elective ¹	3
	15

SEMESTER II

CITA 170 Comp. Concepts & Oper. Sys.	3
CITA 175 Comp. Concepts & Oper. Sys Lab ³ ..	1
CITA 171 Oper. Sys. Use & Administration	3
MATH 141 Statistics	3
GER - DEISJ	3
GER - Natural Science	3
	16

SEMESTER III

CITA 180 Introduction to Programming.....	4
CITA 215 Database Apps & Concepts	3
CITA 220 Data Comm & Network Tech	3
CITA 221 Data Comm & Network Tech Lab ...	1
ECON 101 Macroeconomics OR	
ECON 103 Microeconomics	3
GER Elective (7,8,9,10,11)	3
	17

SEMESTER IV

CITA 204 Systems Analysis and Design ²	3
CYBER 250 Information Security	3
GER Elective (7,8,9,10,11)	3

GER Elective	3
GER Elective.....	3
	15

SEMESTER V

BSAD 301 Principles of Management	3
CITA 300 Management Information Sys.....	3
CITA 310 Web Server Administration.....	3
SOET 361 Project Management.....	3
ACCT 101 Foundations of Financial Acct.	4
	16

SEMESTER VI

ECON 370 Engineering Economics	3
Program Elective - CITA/CYBR/ DATA/GMMD/GAME	3
Program Elective - CITA/CYBR/ DATA/GMMD/GAME	3
Program Elective - CITA/CYBR/ DATA/GMMD/GAME	3
Upper-level Program Elective - CITA/ CYBR/DATA/GMMD/GAME.....	3
	18

SEMESTER VII

CYBR 440 Network Management.....	3
CITA 441 Network Management Lab.....	1
UL Program Elective - CITA/CYBR/GAME.....	3
Upper-level Liberal Arts Elective.....	3
Upper-level Elective.....	3
Elective.....	3
	16

SEMESTER VIII

CITA 330 Emerging Information Technology Applications.....	3
CITA 460 IT & Networked Economy	3
SOET 477 Capstone Project	3
CITA 480 Internship in IT OR 2–Program Electives ⁴	6
	12

NOTE

1. To be eligible for graduation, all CITA courses must be completed with a grade of C or higher, or must be accepted as transfer credits
2. A maximum of three (3) CITA credits from courses numbered below CITA 150 can be counted towards graduation.
3. Online students can substitute CITA 175 and CITA 221 credits with two (2) lower-level program elective credits (CITA/CYBR/DATA). CITA 441 credits can be substituted with one (1) upper-level program elective credit. Alternatively, all three credits can be substituted with a 3-credit up-per-level program elective course (CITA/CYBR/DATA).
4. The minimum qualifying math course is MATH 121, a GER 4 course. It can be substituted with a higher-level GER 4 math course.

ADDITIONAL GRADUATION REQUIREMENTS

Students must take at least four upper-level CITA courses and SOET 477 (Capstone Project) from SUNY Canton.

Legal Studies—BS

According to the U.S. Department of Labor Bureau of Labor Statistics, “The legal system affects nearly every aspect of our society, from buying a home to crossing the street.” Such a profound impact suggests that there are a variety of opportunities for individuals with an education in Legal Studies. The Department of Labor states that employers prefer graduates of postsecondary education programs. A graduate of SUNY Canton’s Legal Studies program may find employment in law firms, corporations, hospitals, and local, state or federal government offices. Since the program covers many legal specialties, students may choose electives that may help them to specialize in one or more areas.

STUDENTS IN THIS MAJOR:

- Spend a significant amount of time engaging in legal research, analysis, and writing.
- Learn from faculty who bring a wealth of real world legal experience to the classroom.
- May take elective courses in Accounting, Business, Criminal Justice, and Liberal Arts & Sciences to receive an interdisciplinary education.
- Can choose as many online program components as needed for maximum flexibility.
- Can choose to engage in a semester-long internship as a culminating experience.

CAREER AND GRADUATE EDUCATION OPPORTUNITIES

- Law school or other graduate programs
- Paralegals or legal assistants in law firms.
- Specialists in Real Estate and mortgage document preparation.
- Professionals in District Attorney, Sheriff, Probation, Legal Aid, and Public Defender Offices

- Freelance work as legal professionals.

CAREER OUTLOOK

- Jobs for graduates in Legal Studies are projected to grow by 12 percent (much faster than average) from 2018 to 2028 and experienced, formally trained paralegals should have the best job prospects according to the U.S. Department of Labor Bureau of Labor Statistics.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).
- Transfer students must have a cumulative grade point average of 2.0 for admission to the Legal studies major and meet specific program requirements to be considered for admission.

PROGRAM REQUIREMENTS

(CURRICULUM 0818)

SEMESTER I	CREDITS
LEST 101 American Legal System.....	3
MATH Elective (GER 4).....	3
American History Elective (GER 9) .	3
ENGL 101 Composition & Spoken Word (GER 1, 2)	3
Social Science Elective (GER 7)	3
FYEP 101 First Year Experience.....	1
	<u>16</u>

SEMESTER II

ACCT 101 Foundations of Financial Accounting.....	4
BSAD 201 Business Law I.....	3
Arts Elective (GER 8 - Must be Liberal Arts)	3
Liberal Arts & Sciences Electives	6
CITA 101 Library/Info Literacy	1
	<u>17</u>

SEMESTER III

BSAD 202 Business Law II	3
LEST 221 Criminal Practice	3
Natural Science Elective (GER 5) .	3-4
DEISJ Elective (GER 3)	3
World Language (GER 11).....	4
	<u>16-17</u>

SEMESTER IV

LEST 310 Legal Research	3
ENGL 301 Professional Writing & Com.	3
World History & Global Awareness Elective (GER 10)	3
Humanities Elective (GER 6)	3
Upper Level Legal Studies Elective.....	3
	<u>15</u>

SEMESTER V

LEST 340 Constitutional Law	3
LEST 330 Legal Writing**	3
LEST 350 Civil Litigation	3
Liberal Arts & Sciences Electives	6
	<u>15</u>

SEMESTER VI

BSAD 319 Professional Ethics	3
LEST 449 Advanced Legal Writing **	3
Liberal Arts & Sciences Electives (U/L Recommended)	9
	<u>15</u>

SEMESTER VII

LEST 429 Internship Orientation (If taking LEST 480 in 8th semester)	1
Upper Level Legal Studies Electives ..	6
Upper Level Liberal Arts & Sciences Electives.....	9
	<u>15-16</u>

SEMESTER VIII

LEST 480 Legal Studies Internship	3-15
OR	
LEST 485 Senior Project	3-15
AND/OR	
U/L Program Electives	3-15
	<u>15</u>

Total Credits for Degree 124-127

** Writing Intensive Course

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

U/L Legal Studies Electives: LEST 320, LEST 360, LEST 370, LEST 375, LEST 380, LEST 388, LEST 410, and LEST 450.

U/L Program Electives: LEST 320, LEST 360, LEST 370, LEST 375, LEST 380, LEST 388, LEST 410, LEST 450, BSAD 301, BSAD 305, BSAD 310, EADM 307, HSMB/NURS 302, JUST 345, and JUST 350.

NOTE: Legal Studies students must meet all ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/business/lest/.

Management—BBA

The Bachelor of Business Administration in Management provides a solid foundation in current management theory and practice. Students are introduced to the principles of accounting, finance, marketing, strategy, operations, human resources, economics, ethics, and communications. Case studies, internships and real world applications in corporate, non-profit, and government settings are integral parts of this exciting four-year program.

STUDENTS IN THIS MAJOR:

- Are educated in all of the functional managerial areas.
- Use cutting-edge case studies to hone analytical skills.
- Are encouraged to pursue a minor for additional skill sets.

CAREER OPPORTUNITIES:

Graduates plan, organize, and control organizational resources to enhance value to stockholders and stakeholders of the organization. Graduates assume entry managerial roles in:

- Retail organizations
- Non-profit organizations
- Government organizations
- Manufacturing organizations

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101) and GER 1 Math.
- Transfer students must have a cumulative GPA of 2.0 to be admitted into the program.

PROGRAM REQUIREMENTS:

(CURRICULUM 1645)

SEMESTER I CREDITS

FYEP 101	First Year Experience.....	1
BSAD 100	Intro. to Business	3
CITA 110	Intro. to Information Technology	3
ENGL 101	Composition & the Spoken Word (GER 1,2)	3
	MATH 111 or Higher (GER 4) ... 3-4 Diversity: Equity Inclusion and SJ (GER 3)	3
		<u>16-17</u>

SEMESTER II

ACCT 101	Foundations of Financial Accounting.....	4
BSAD 203	Marketing.....	3
ECON 101	Macroeconomics (GER 7)	3
	American History (GER 9).....	3
	Humanities (GER 6)	3
		<u>16</u>

SEMESTER III

BSAD 201	Business Law I.....	3
ACCT 102	Foundations of Managerial Accounting.....	3
ECON 103	Microeconomics	3
	Natural Sciences Elective (GER 5)....	3
	L/L Elective (BSAD/ECON/ACCT).....	3
		<u>15</u>

SEMESTER IV

BSAD 202	Business Law II.....	3
FSMA 210	Introduction to Finance.....	3
MATH 141	Statistics	3
	World Language (GER 11) OR World History & Global Awareness (GER 10)	3
	Business Elective (LL)	3
		<u>15</u>

SEMESTER V

BSAD 301	Principles of Management	3
BSAD 310	Human Resource Management.....	3
BSAD 373	International Business Management .	3
	U/L Elective (BSAD/ECON/ACCT).....	3
	Business Elective (Upper Level)	3
		<u>15</u>

SEMESTER VI

BSAD 304	Business Analytics.....	3
BSAD 319	Professional Ethics*	3
BSAD 340	Management Communications	3
	General Elective.....	3
	Business Elective (Upper Level)	3
		<u>15</u>

SEMESTER VII

BSAD 400	Operations Management	3
BSAD 449	Strategic Policies and Issues.....	3
	General Elective.....	3
	U/L General Elective	3
	U/L Elective (BSAD/ECON/ACCT).....	3
		<u>15</u>

SEMESTER VIII

BSAD 406	Cumulative Evaluation-BBA in Management	3
BSAD 450**	Business Internship AND/OR.	6-12
BSAD 410	Senior Project AND/OR	6-12
	U/L Program Elective	3-12
		<u>15</u>

L/L = Lower Level Courses (100/200)

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

*Fulfills writing intensive requirement.

**3.0 GPA required to enroll in BSAD 450 Business Internship

Program Electives: ACCT, AGMT 310, AGMT 330, BSAD, ECON, FSMA, LEST, HSMB, SPMT, ESPT, and CITA

NOTE: Management students must meet eight of the ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/business/bsad/.

Mechanical Engineering Technology—*B. Tech.*

Graduates of the Bachelor of Mechanical Engineering Technology (B. Tech) program have knowledge on the applied aspects of science and engineering technology that demonstrate skills in analysis, design, development, implementation, and oversight of mechanical systems. Graduates will exhibit skills necessary to be successful in industrial manufacturing processes, experimental techniques and procedures, machinery, thermal/fluid/energy systems, instrumentation and control systems, heating, ventilation and air conditioning (HVAC) systems, and Alternative Energy Systems dependent upon elective choices. Graduates will be successful technologists, field technologists, technical managers, process and sales engineers and will be prepared academically to enter and succeed in related postgraduate degree programs.

STUDENTS IN THIS MAJOR:

- Choose from four tracks of study: (Alternative & Renewable Energy, Mechanical Energy Systems Design, Manufacturing/Mechanical Design, Mechatronics and Robust Quality)
- Apply mathematics, science, engineering and technology to design systems, components and/or processes.
- Utilize sophisticated laboratory equipment to conduct, analyze and Interpret experimental data and report results for process improvement.
- Apply computer skills to design, interpret and analyze data, solve problems and prepare reports/presentations for professional communications.
- Develop team skills through hands projects that require a commitment to quality, timeliness, and continuous improvement while maintaining professional, ethical and social responsibilities.
- Gain real world experience through internship/Co-Op opportunities and project-based learning.

CAREER OPPORTUNITIES:

- Aerospace, Automation & Controls, Automotive Industry, Composite Materials Production, CIM, Electronics Manufacturing, Construction and Fabrication, Machining & Metalworking, Manufacturing (electronics, mechanical, defense, energy, Medical Products Packaging, Plant Engineering & Maintenance,

Plastics Molding & Manufacturing, Product Design & Development, and Rapid Prototyping, Quality Assurance, Robotics, Supply Chain Management, and Graduate School.

ACCREDITATION

Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS

- Candidates should have completed NYS Regents Math B with grade 80 or better, or Course III with one additional year of high school mathematics, and be ready to enroll in pre-calculus. If a student does not meet this criterion, he/she will be required to take prerequisites in mathematics.
- Students who graduate with a two year college degree in a program related area will be evaluated with the objective of awarding maximum credit toward the completion of the (B Tech) degree.
- Transfer students from community colleges, universities or other institutions of higher learning with some coursework completed will be evaluated on case-by-case bases.
- Refer to the table of high school course prerequisites for admission.

PROGRAM REQUIREMENTS:

(CURRICULUM 0235)

SEMESTER I	CREDITS
MATH 123 Pre-Calculus (GER 1)	4
MECH 121 Manufacturing Processes I	3
ENGS 101 Introduction to Engineering	2
PHYS 121/131 College/University Physics I (GER 2)	3
PHY 125/135 Physics Lab 1 GER 2)	1
MECH 101 Drawing for Engineers	1
	14

SEMESTER II

MATH 161 Calculus I (GER 1)	4
ENGL 101 Composition & The Spoken Word (GER 10)	3
PHYS 122/132 College/University Physics II (GER 2)	3
PHYS 126/136 Physics Lab 2 (GER 2)	1
MECH 102 Parametric Modeling	2
MECH 122 Introduction to 3D Printing	1
Elective ¹	2
	16

SEMESTER III

MATH 162 Calculus II (GER 1)	4
ENGS 201 Statics	3
ELEC 261 MET Electricity	4
MECH 241/ENGS 314 Fluid Mechanics I	3
MECH 242 Fluid Power lab	1
GER (6,7, 8,9,10,11) ²	3
	18

SEMESTER IV

ENGS 203 Engineering Strength of Materials	3
MECH 220 Engineering Materials	3
MECH 221 MET Lab ³	1
MECH 301/ ENGS 202 Technical Dynamics/Dynamics	3
MECH 303 GD&T (Geometric Dimensioning and Tolerancing)	2
Diversity Elective	3
	15

SEMESTER V

Elective (300 or 400 level) ⁴	3
ENGS 350 Mechanics of Machine Elements	4
MECH 342 Thermodynamics	3
MATH 364 Differential Equations	4
ENGS 102 Programming for Engineers	2
	16

SEMESTER VI

MECH 343 Heat Transfer	3
MECH 312 Engineering Design	3
SOET 400 Technical Communication	3
MATH 141 Statistics	3
Elective (300 or 400 level) ⁴	3
	15

SEMESTER VII

MECH 377 Capstone Research & Proposal	2
Elective (300 or 400 level) ⁴	3
Elective (300 or 400 level) ⁴	3
GER Elective (6, 7, 8, 9, 10, 11) ²	3
GER Elective (6, 7, 8, 9, 10, 11) ²	3
MECH 310 Instrumentation and Controls for Mechanical Engineers	3
	17

SEMESTER VIII

MECH 477 Capstone Project	3
ECON 370 Engineering Economics	3
SOET 377 Engineering Ethics ⁶	1
Elective (300 or 400 level) ^{4,5}	3
Elective (300 or 400 level) ^{4,5}	3
	13

- 1 Program electives selected from ACHP, AREA, ENGS, CITA, CONS, ELEC, MATH, MECH, SOET designators and AUTO 104.
- 2 Must complete 7 of 11 GERS and 30 total credits. Required GERS: (1/2), 3, 4, and 5. Need to pick 3 others.
- 3 Writing intensive course requirement.
- 4 Program electives are upper level from all ACHP, AREA, CITA, CONS, ELEC, MATH, PHYS, MECH, MKTX, SOET course listings. Program electives are selected by advisement based on student interest and career goals. BSAD 421 can also be used.
- 5 MECH 480 Co-Op can be equivalent up to 6 credit hours.
- 6 Can substitute SOET 378 or BSAD 319 if desired.

Student Learning Outcomes can be found at www.canton.edu/csoet/mech/.

Nursing—BS

The SUNY Canton RN-BS Nursing program is based upon the beliefs that:

- Communities are comprised of unique, holistic individuals and aggregates who have values and beliefs that originate from their life-world, who have specific needs and are capable of making decisions by themselves, with others, and/or by proxy.
- Health and well-being are dynamic lived experiences uniquely defined by the individual and community within the context of culture and environment.
- Nursing is a unique profession that provides a service to society that is culturally sensitive, evidence-based, collaborative, and individualized. Utilizing the nursing process, the nurse facilitates transformation within individuals, groups, and communities to attain desired outcomes.

STUDENTS IN THIS MAJOR:

- Demonstrate critical thinking and decision making that utilizes the nursing process and evidence-based practice in the delivery of care to culturally diverse individuals, families, groups, and community.
- Synthesize knowledge from the liberal arts and nursing to promote the health and well-being of culturally diverse individuals, families, groups, and communities.
- Integrate legal and ethical concepts with the leadership role to advance and promote the health and well-being of culturally diverse individuals, families, groups, and communities.
- Utilize nursing theory/conceptual frameworks, nursing research, and evidence-based practice in addressing the nursing care needs of culturally diverse individuals, families, groups and communities.
- Incorporate leadership theory to the nurse management role in the collaboration, coordination, and provision of nursing care in health care settings.

- Apply knowledge from nursing, humanities, biological, and social sciences to plan, implement, and evaluate care for sick and well individuals, families, groups, and communities.
- Participate as nurse leaders on interdisciplinary care teams to influence positive social change and health care policy.
- Plan and implement educational activities that empower individuals, families, group, and communities to manage their health care at the local, national, and global level.
- Collaborate with health care colleagues to promote holistic health care for individuals, families, groups, and communities.

CAREER OPPORTUNITIES:

- Public and Community Health
- Armed Services and Veterans Administration
- Entry level nursing management
- Acute, long-term, and specialty nursing units

TRANSFER OPPORTUNITIES:

- Graduates of the RN-BS program are able to transfer into Nursing graduate programs.

ACCREDITATIONS:

- Registered by the NYS Education Department, Office of the Professions State Education Building-2nd Floor, Albany NY 12234, and phone: 518-474-3817.
- Accredited by the Accreditation Commission for Education in Nursing, 3390 Peachtree Road, Suite 1400, Atlanta, Georgia 30326, and phone: 404-975-5000.

ADMISSION REQUIREMENTS:

Admission requirements can be found online at: http://www.canton.edu/sci_health/nurs/description.html

PROGRAM REQUIREMENTS:

(CURRICULUM 0291)

SEMESTER I	CREDITS
NURS 300 Conceptual Frameworks in Nursing	3
NURS 303 Health Assessment In Nursing	4
MATH 111 Survey of Math	OR
MATH 121 College Algebra*	3-4
Liberal Arts Elec. (GER 4,5,6,7,8, 9)	3
BIOL 335 Pathophysiology	3
	16-17

SEMESTER II

NURS 302 Legal & Ethical Iss. in Healthcare	3
NURS 304 Health Promotion & Restoration	3
BIOL 310 The Genome	3
MATH 141 Statistics	3
SOCI 101 Intro to Sociology	3
Lib. Arts Elective (GER 4,5,6,7,8, 9)	3
	18

SEMESTER III

NURS 370 Research Methods in Health Sci.	3
NURS 403 Transcultural Nursing	2
Lib. Arts Elective (GER 4,5,6,7,8, 9)	3
U/L Lib. Arts Elec. (GER)	3
U/L Lib. Arts Elec. (GER)	3
	14

SEMESTER IV

NURS 402 Community Health Nursing	4
NURS 400 Nursing Mgmt & Leadership **	3
U/L Lib. Arts Elec. (GER)	3
U/L Liberal Arts Elective	3
U/L Liberal Arts Elective	3
	16

—Part-time status program requirements can be found online at: http://www.canton.edu/sci_health/nurs/description.html

—Students must pass all courses with a grade of “C” or better prior to graduating with the BS degree.

* Students who have not met the prerequisite for MATH 141 (Statistics) take MATH 111 or Math 121; students who have already taken Statistics or have met the prerequisite for MATH 141 take a Liberal Arts elective

** Fulfills writing intensive requirement

UL = Upper-Level Courses (300/400)

GER = General Education Requirement

NOTE: Nursing students must take seven out of ten General Education Requirements including one and ten, 30 total General Education credits and 45 upper level credits.

Student Learning Outcomes can be found at www.canton.edu/sci_health/nurs/.

Residency Requirements: Students must complete a minimum of 30 credits at SUNY Canton's RN-BS program in order to receive a Bachelor of Science degree from SUNY Canton. Required courses include: Health Assessment in Nursing (NURS 303), Nursing Management and leadership (NURS 400), and Community Health Nursing (NURS 402).

Nursing Dual Degree—AAS/BS

The Dual Degree Nursing Program (DDNP) combines general education courses and nursing courses that allow students to complete their baccalaureate education in four years and be eligible to take the NCLEX-RN (RN licensing exam) in three years. After three years of full-time study, graduates earn an Associate in Applied Science (AAS) Degree in nursing and are eligible to take the NCLEX-RN licensing examination to become Registered Nurses (RN). The fourth year is online for those who have obtained their RN license and have graduated with an AAS degree in nursing from SUNY Canton. The final year is career oriented so that students may work as RNs and attend school online to complete their degree.

STUDENTS IN THIS MAJOR

- Make judgments in practice, substantiated with evidence, that integrate nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context.
- Minimize risk of harm to patients and providers through both system effectiveness and individual performance.
- Use information and technology to communicate, manage knowledge, mitigate error, and support decision-making.
- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context.
- Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.
- Advocate for clients and families in ways that promote their self-determination, integrity, and ongoing growth as human beings.
- Recognize the client or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for client's preferences, values, and needs.
- Examine the evidence that underlies clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for patients, families, and communities.
- Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems
- Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care.
- Utilize the nursing process, think critically, and base client care on evidence based practice.
- Engage in active learning.

- Develop personally and professionally.
- Upon meeting the requirements for graduation, are eligible to sit for the licensing examination to become Registered Professional Nurses.

PROGRAM HIGHLIGHTS

- Career oriented
- Obtain eligibility to be a Registered Professional Nurse
- Develop critical thinking and professional behaviors
- Become competent in nursing skills
- Participate in the skills laboratory to build competencies
- Participate in clinical practicums, including clinical assignments locally and at SUNY Upstate Medical

CAREER OUTLOOK

- Nursing is the largest health care occupation.
- There is increasing diversity in nursing employment, and projections indicate large numbers of new jobs.

EMPLOYERS OF SUNY

CANTON GRADUATES

- Hospitals and physicians' offices
- Home healthcare services
- Nursing care facilities
- Correctional facilities
- Schools
- Military service

TRANSFER OPPORTUNITIES

- Graduates have a number of transfer options including: RN-MSN programs.

ACCREDITATIONS

- Registered by the NYS Education Department, Office of the Professions State Education Building-2nd Floor, Albany NY 12234, and phone: 518-474-3817.
- Accredited by the Accreditation Commission for Education in Nursing, 3390 Peachtree Road, Suite 1400, Atlanta, Georgia 30326, and phone: 404-975-5000.

ADMISSION REQUIREMENTS:

Admission requirements can be found online at: www.canton.edu/sci_health/nur/

PROGRAM REQUIREMENTS:

(CURRICULUM 2373)

SEMESTER I	CREDITS
BIOL 217 Anatomy and Physiology I	4
ENGL 101 Composition and the Spoken Word	3
PSYC 101 Introduction to Psychology	3
MATH111 Survey of Math OR	
MATH 121 College Algebra.....	3
SOCI 101: Introduction to Sociology	3
	16

SEMESTER II

BIOL 218 Anatomy and Physiology II.....	4
PSYC 225 Human Development or	
PSYC 220 Child Development	3
MATH 141 Statistics	3
Liberal Arts Elective (GER 6,8,9,10, or 11)	3
Liberal Arts Elective (GER 6,8,9,10, or 11)	3
	16

SEMESTER III

BIOL 209 Microbiology	4
NURS 101 Nursing Fundamentals.....	6
NURS 103 Pharmacology	1
NURS 105 Nursing Seminar	1
Liberal Arts Elective (GER 3: DEISJ)	3
	15

SEMESTER IV

NURS 106 Maternal Newborn Nursing.....	4.5
NURS 107 Mental Health Nursing.....	4.5
NURS 104 Pharmacology	1
BIOL 310 The Genome	3
U/L Liberal Arts Elective	
(GER if needed)	3
	16

SEMESTER V

BIOL 335 Pathophysiology.....	3
NURS 200 Pharmacology	1
NURS 201 Medical Surgical Nursing I.....	10
BIOL 310 The Genome	3
U/L Liberal Arts Elective	
(GER if needed)	3
	17

SEMESTER VI

NURS 202 Medical Surgical Nursing II	10
NURS 203 Professional Issues & Trends in Nursing...	1
NURS 204 Pharmacology	1
U/L Liberal Arts Elective	
(GER if needed)	3
	15

SEMESTER VII

NURS 300 Conceptual Frameworks	3
NURS 302 Ethical and Legal Issues.....	3
NURS 303 Health Assessment	4
NURS 304 Health Promotion and Restoration	3
Upper Liberal Arts Elective	3
	16

SEMESTER VIII

NURS 370 Research Methods in the Health Sciences.	3
NURS 400 Nursing Mgmt. and Leadership	3
NURS 402 Community Health Nursing.....	4
NURS 403 Transcultural Nursing	2
Upper Liberal Arts Elective	3
	15

#Writing Intensive

* A grade of "C+" or better is required for successful completion of all 100/200 level Nursing courses and a "C" or better in all 300/400 level Nursing and co-requisite courses.

† GER 4 Mathematics is infused within this course.

1. Students who have not met the pre-requisite for MATH 141 Statistics must take MATH 111 Survey of Math or MATH 121 College Algebra; students who have already taken Statistics or have met the pre-requisite for Statistics can take an alternate Liberal Arts course.

2. Once enrolled in NURS 101, students must complete the program within four years.

NOTE: Successful completion of all co-requisite courses in a semester and a semester GPA of 2.0 or better is required to con-tinue in the program.

Sports Management—BBA

The BBA in Sports Management prepares individuals for professional careers within sport organizations, such as non-profit companies, commercial and private enterprises, government/public sector jobs, and various levels of professional sports.

The BBA in Sports Management will develop capable sport management professionals able to apply creative communication, leadership, and managerial skills in an array of positions in the sport industry. These positions can include sports administration, sales, marketing, public relations, information and media, operations, facilities, and event management. The program offers an exciting array of sports management courses that provide students with experiential learning opportunities and hands-on application throughout their journey. The program also offers various culminating experience options that include applied senior level courses and/or senior research project and/or semester internship.

STUDENTS IN THIS MAJOR:

- Will be prepared to be effective managers and leaders in the various skills, roles, and functions of sport management professionals.
- Develop communication and technical skills needed to be effective professionals in various sport management settings.
- Will gain valuable hands-on experience and developmental insights from applied learning opportunities throughout the program.

CAREER OPPORTUNITIES

- Sport Event Management
- Marketing and Promotions
- Athletic Director
- Sport Facilities Manager
- Sport Programming
- Athletic Business Operations
- Sport Media Relations
- Ticket Sales Operations

- Sport Corporate Sales
- Recreation Programming
- Sport Coordinators

In addition, the Sport Management program prepares students who desire to pursue an advanced degree in Sport Management.

ADMISSION REQUIREMENTS

- Students must satisfy SUNY Canton general admission's requirements.
- Students who do not meet the Requirements to enroll in Math 106 or English 101 will need to take an additional course(s) that will prepare them for subsequent enrollment in those two courses.

PROGRAM REQUIREMENTS (CURRICULUM 0182)

SEMESTER I CREDITS

SPMT 100	Major Prep	1
SPMT 101	Foundations of Sports Management	3
BSAD 100	Introduction to Business.....	3
ENGL 101	Composition & the Spoken Word ...	3
	Math (GER 4)*	3-4
	GER (6, 8, 9, 10, 11)	3
		<u>15-16</u>

SEMESTER II

SPMT 242	Sports Finance	3
BSAD 201	Business Law I	3
	GER 3 (Diversity)	3
SOCI 101	Intro. To Soc.....	3
	GER (6, 8, 9, 10, 11)	3
	GER (6, 8, 9, 10, 11)	3
		<u>16-17</u>

SEMESTER III

SPMT 202	Sport in Society	3
SPMT 240	Sports Governance.....	3
ECON 103	Microeconomics (GER 7).....	3
ACCT. 101	Found. of Finan. Accounting.....	4
	Natural Science (GER 5)	3-4
		<u>15</u>

SEMESTER IV

SPMT 241	Legal Issues in Sport	3
SPMT 311	Sports Information	3
BSAD 203	Marketing.....	3
	GER (6, 8, 9, 10, 11)	3
	GER (1-11)	3
		<u>15</u>

SEMESTER V

SPMT 203	Leadership for Sports Professionals ...	3
SPMT 307	Sports Marketing.....	3

SPMT 411	Sports Public Relations*	3
BSAD 301	Principles of Management	3
BSAD 310	Human Resource Management.....	3
		<u>15</u>

SEMESTER VI

SPMT 306	Sports Operations & Facilities Mgt....	3
SPMT 308	Sports Event Mgt.....	3
SPMT 320	Global Sports Perspectives	3
	U/L Program Elective	3
	General Elective**	3
		<u>15</u>

SEMESTER VII

SPMT 410	Orienta. to Culminating Experience..	1
SPMT 415	Sports Media & Broadcasting.....	3
	U/L Program Elective	3
	U/L Program Elective	3
	General Elective.....	3
	General Elective.....	3
		<u>16</u>

SEMESTER VIII

Sport Management Internship (421) OR Senior Project (422) OR U/L Program Electives or Combination of:	
Internship OR Senior Project OR:	
U/L Program Electives	3-15
	<u>15</u>

Students may also combine an internship with Upper-Level electives. Internship must be a minimum of 6 credits.

Students must have a combined 3.0 GPA of all SPMT courses completed to be eligible to apply for an internship.

UPPER LEVEL PROGRAM ELECTIVES:

SPMT 300	SPMT Practicum.....	1-3
SPMT 312	Sport Entrepreneurship.....	3
SPMT 412	Sport Sales and Sponsorships	3
SPMT 413	Contemporary Issues in College Sport Administration	3
SPMT 431	Applied Sports Media and Broadcasting.....	3
SPMT 432	Applied Sports Event Management....	3

(Upper level BSAD, ECON, FSMA, HEFI, PSYC, ESPT, courses also accepted as Program Electives)

* GER MATH must be MATH 111 or higher

UL = Upper Level Courses (300/400)

GER = General Education Requirement (students must earn 30 SUNY-General Education Requirement credits with at least one course in seven different GER categories. Required categories include Communication (1 or 2), Diversity (3), Math (4), and Natural Science & Scientific Reasoning (5).

Student Learning Outcomes can be found at www.canton.edu/sci_health/spmt/

Veterinary Service Administration—BBA

A 2-year (minimum) degree from any AVMA-accredited program in Veterinary Science Technology or Veterinary Technology fulfills the first two years of SUNY Canton's Bachelor of Business Administration (BBA) program in Veterinary Service Administration. In years 3 and 4, a foundation is established in basic business and accounting principles, which are then applied to the management of specific types of veterinary businesses and institutions. Students are thereby provided with the knowledge and skills necessary to manage a business or organization that provides veterinary care to animals. Students will finish the program with an internship concentrating on management and administration within a veterinary setting. This program may be completed partially or entirely online.

STUDENTS IN THIS MAJOR:

- Begin by laying a foundation in Business, Accounting, Math, and Liberal Arts.
- Build upon this foundation with coursework specific to veterinary management.
- Will spend a semester in the field as an intern in a managerial capacity.
- Are prepared for entry-level management positions in veterinary hospitals or other veterinary industries or organizations.
- Will complete the course work required for Certified Veterinary Practice Manager (CVPM) certification.

CAREER OPPORTUNITIES:

- Veterinary Practice Management
- Animal Shelter Management
- Veterinary Mobile and Spay/Neuter Clinic Management
- Biomedical Research Facility Management
- Zoo and Wildlife Management
- Public Sector employment (State, Federal, and Local regulatory agencies)

CAREER OUTLOOK:

- Veterinary Technician has been listed as one of Money Magazine's "Top 10 Fastest Growing Career Fields." Coupling this training with a baccalaureate degree focusing on veterinary business management increases its value, expanding the scope of employment opportunities and earning potential for graduates.
- Veterinary hospitals and other animal care facilities seek managers with not only a working knowledge of the medical and technical aspects of veterinary medicine, but also an understanding of the operational structure of animal care facilities and the ability to oversee the personnel, information, finances, infrastructure, equipment, and other integral components of the operation of these facilities.
- With fewer, larger veterinary facilities becoming the norm, there is greater stratification of duties within these facilities, and greater demand for full-time Managers and Technician/Managers.

REQUIREMENTS FOR ADMISSION INTO JUNIOR YEAR OF PROGRAM:

- Graduation from an AVMA-accredited Veterinary Technology or Veterinary Science Technology program.
- Either Veterinary Technician licensure/registration/certification, as applicable in for state of residency, OR eligibility thereof.

PROGRAM REQUIREMENTS:

(CURRICULUM 2535)

SEMESTER V

ACCT 101	Foundations of Financial Accounting	4
BSAD 201	Business Law I	3
BSAD 340	Management Communications*	3
MATH 111	Survey of Mathematics or Higher	3
	Liberal Arts Elective (GER if needed)	3
		<u>16-17</u>

SEMESTER VI

BSAD 215	Small Business Management	3
VSAD 301	Veterinary Practice Management	3
BSAD 310	Human Resource Management	3
HLTH 303	Occupational Health and Safety	3
	U/L Liberal Arts Elective (GER if needed)	<u>3</u>
		<u>15</u>

SEMESTER VII

HSMB 301	Public Health Issues	3
BSAD 301	Principles of Management	3
VSAD 302	Animal Care Institution Management	<u>3</u>
VSAD 308	Veterinary Service Administration Internship Orientation	1
VSAD 402	Veterinary Business & Financial Management	3
	U/L Liberal Arts Elective (GER if needed)	<u>3</u>
		<u>16</u>

SEMESTER VIII

VSAD 408	Internship for Veterinary Service Administration	12
	Upper-Level General Elective	<u>3</u>
		<u>15</u>

* *Fulfills writing intensive requirement.*

U/L = *Upper-Level Courses (300/400)*

GER = *General Education Requirement*

NOTE: Veterinary Service Administration students must meet seven of the ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/sci_health/vsct/.

Veterinary Technology—BS

The Bachelors of Science degree program in Veterinary Technology provides an advanced educational opportunity to students interested in pursuing careers in the veterinary health care field. The program includes specific course work required in our Veterinary Technology AAS program and adds upper division offerings in the sciences and applied electives to obtain the distribution hours required of a Bachelor's of Science degree. Graduates of this program have the opportunity to become veterinary technicians coupled with the career flexibility that a Bachelor's degree provides.

STUDENTS IN THIS MAJOR:

- Work with companion animals, farm animals and common laboratory animals.
- Receive advanced technical training above core requirements of a graduate veterinary technician.
- Perform two 120 hour Preceptorships
- Will be eligible to take the Veterinary Technician National Licensing Examination (VTNE).
- May be eligible to pursue a post graduate degree (MS, PhD, DVM).

CAREER OPPORTUNITIES:

Veterinary technicians provide professional technical support to veterinarians, biomedical researchers, and other animal care specialists. They may work in:

- Clinical practice
- Educational Institutions
- Public Health
- Government agencies
- Research & Pharmaceutical industry
- Veterinary supply and equipment sales

CAREER OUTLOOK:

- Veterinary Technician has been listed as one of Money Magazine's "Top 10 Fastest Growing Career Fields."
- At the present time, there is a serious shortage of veterinary technicians throughout the country.

TRANSFER OPPORTUNITIES:

- Articulation with Ross University School of Veterinary Medicine for students with an overall GPA of 3.0 or higher and possessing the required prerequisite courses.

ADMISSION REQUIREMENTS:

Admission is selective and based on academic credentials. To be considered for admission, please refer to the requirements posted on our webpage at: www.canton.edu/sci_health/vet/description.html

The pre-exposure rabies vaccine is required in the program. This is administered in a series of two vaccinations and must be completed during or prior to the semester student is enrolled in VSCT 101

PROGRAM REQUIREMENTS:

(CURRICULUM 2278)

SEMESTER I CREDITS

VSCT 101	Fundamental Vet. Nursing Skills I	2
VSCT 103	Intro. to Animal Agriculture	2
BIOL 150	College Biology I	4
CHEM 150	College Chemistry I	4
ENGL 101	Expository Writing OR	
ENGL 101	Composition & Spoken Word	3
FYEP 101	First Year Experience	1
		<u>16</u>

SEMESTER II

VSCT 104	Veterinary Office Practices	1
VSCT 114	Animal Anatomy & Physiology	3
VSCT 115	Fundamental Vet. Nursing Skills II	2
BIOL 155	College Biology II	4
CHEM 155	College Chemistry II	4
VSCT 206	Anesthetic Principles	3
		<u>17</u>

SEMESTER III

BIOL 209	Microbiology	4
	Math Elective (GER 4) †	3
	Lib.Arts Elec. (GER 6, 8, 9, 10, 11)	3
	DEISJ Elective	3
VSCT 214	Veterinary Pharmacology	2
		<u>15</u>

SEMESTER IV

VSCT 112	Veterinary Clinical Pathology I	3
VSCT 212	Research Animal Techniques	1
VSCT 213	Practical Nutrition	2
PSYC 101	Introductory to Psychology	3
	Lib.Arts Elec. (GER 4, 5, 6, 7, 8, 9)	6
		<u>15</u>

SEMESTER V

VSCT 201	Veterinary Technology Preceptorship I	1
VSCT 202	Veterinary Clinical Pathology II	3
VSCT 203	Small Animal Medicine & Therapeutic Techniques	3
VSCT 204	Large Animal Medicine & Therapeutic Techniques	3
VSCT 205	Radiographic Techniques	2
	U/L Program Elective	3
	U/L Liberal Arts Elective	3
		<u>17</u>

SEMESTER VI

VSCT 207	Health and Disease of Farm Animals	2
VSCT 209	Veterinary Technology Preceptorship II	1
VSCT 210	Veterinary Microbiology	1
VSCT 211	Animal Hospital Practices and Procedures *	3
	U/L Liberal Arts Electives	3
	U/L Program Elective	3
	U/L BIOL/CHEM	3
		<u>14</u>

SEMESTER VII

	U/L Program Electives	9
	U/L Liberal Arts Elective	3
		<u>15</u>

SEMESTER VIII

	U/L Program Electives	6
	U/L Liberal Arts Elective	9
		<u>15</u>

† Math Elective: MATH 111, 121, 122, 141 or another appropriate math by advisement

—Of the courses with the VSCT prefix, any course may only be repeated one time.

—Students are required to earn a C or better in all specified curriculum courses prefixed with VSCT in order to progress in the program.

—The NYS Education Department Office of the Professions requires persons applying for licensure to answer questions related to a conviction of a crime or professional misconduct.

* Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

U/L Program Electives: Any U/L course with the prefix of: VSAD, VSCT, BIOL, or CHEM; as well as: BSAD 319 Professional Ethics, HSMB 301 Public Health Issues, HSMB 303 Occupational Health and Safety, or SSC1 370 Research Methods in the Social & Health Sciences.

NOTE: Veterinary Technology students must take seven out of ten General Education Requirements including one and ten, 30 total General Education credits.

Student Learning Outcomes can be found at www.canton.edu/sci_health/vet/.

Apprentice Training: Industrial Trades—AAS

STUDENTS IN THIS MAJOR:

- Enter into this program while working towards or after obtaining a Journeyman's Certificate through technical instruction and on-the-job training through the BOCES coordinated NYS Apprentice Program.
- Earn the equivalent of one year's college-level study following satisfactory completion of the Journeyman's Certificate, leading to an Associate in Applied Science.

CAREER OPPORTUNITIES:

- Program is designed to prepare skilled tradesmen to enhance their employment growth potential, not entry-level employment.

POTENTIAL SALARY:

- Average salary for skilled trades employees varies greatly depending on employer. This degree can enhance the employee's earning ability both with the current employer and future employers.

PROGRAM REQUIREMENTS: (CURRICULUM 0473)

CREDITS

Related Technical Instruction and
Supervised On-the-Job Training30

(Represented by satisfactory completion of Journeyman's Certificate with related instruction provided by
St. Lawrence-Lewis BOCES)*

English/Humanities.....	6
Social Sciences	6
Mathematics/Science.....	6-8
Liberal Arts & Science Elective.....	3
General Electives	9
	30-32

** Fulfills writing intensive requirement.*

Student Learning Outcomes can be found at
www.canton.edu/business/apprentice.html.

Automotive Technology—AOS

Graduates of the Automotive Technology program experience an exciting period of transition as manufacturers continue their shift toward higher fuel efficiency. Recruiters and employers of SUNY Canton's graduates include dealerships, service industries, automobile manufacturers, and parts suppliers. Graduates learn how to troubleshoot, diagnose and repair all aspects of the automobile power train, suspension, steering, braking and air conditioning systems.

STUDENTS IN THIS MAJOR:

- Have the opportunity to earn two Snap-On Diagnostics certifications.
- May receive Subaru training in senior year if academic average is 'B' or better.
- Can earn NATEF certification upon successful examination.
- Utilize the latest technology in an electronics-based curriculum.
- Acquire extensive hands-on experience in well-equipped laboratories.
- Receive a world class education in automotive electrical, mechanical, technical, and services areas.
- Learn on late model cars donated by automotive manufacturers.
- Get special attention from faculty in small laboratory classes.
- Enjoy outstanding career placement.

CAREER OPPORTUNITIES:

- Automotive Service Technician
- Service Manager
- Service Advisor
- Industrial Research and Development
- Automotive Machine Shop
- Auto Parts Manager/Owner
- Technical Representative
- Automatic Transmission Technician
- Wheel Alignment/Suspension Technician
- Maintenance Technician
- Fleet Maintenance Supervisor/Technician

- Heavy Equipment Maintenance Technician

CAREER OUTLOOK:

- The U.S. Department of Labor cites a strong demand for qualified automotive technicians and master technicians.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Ford Motor Company
- Chrysler Corporation
- Toyota (Lexus Division)
- General Motors Corporation
- Sears
- Firestone Tire Company
- Goodyear Tire Company
- NAPA Auto Parts
- Snap-On Tools Corporation
- Taylor Rental Corporation
- Troyer Race Car Engineering
- Various dealerships throughout NYS
- Many graduates own their own businesses.

TRANSFER OPPORTUNITIES:

- Morrisville State College
- SUNY Utica/Rome, Oswego

ARTICULATION:

- Applicants who have completed a two-year vocational-technical automotive program may qualify for advanced standing (transfer credit).

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Applied College Mathematics (MATH 101)

PROGRAM REQUIREMENTS:

(CURRICULUM 0525)

SEMESTER I

MATH 101	Applied College Mathematics ¹	4
AUTO 112	Automotive Electrical Systems	3
AUTO 122	Automotive Electrical Systems Lab ...	1

AUTO 101	Automotive Service.....	2
AUTO 111	Automotive Service Lab.....	1
AUTO 104	Basic Welding.....	2
ENGL 101	Composition & The Spoken Word (GER 10)	3
		16

SEMESTER II

AUTO 113	Engine Performance I	3
AUTO 114	Engine Performance I Lab	1
AUTO 141	Automotive Brake Systems.....	3
AUTO 144	Automotive Brake Systems Lab.....	1
AUTO102 or 103	Diesel Engines or Automotive Air Conditioning ³	2
AUTO 221	Automotive Transmissions.....	4
GER 5, DEISJ Elective.....		3
		17

SEMESTER III

AUTO 213	Engine Performance II.....	4
AUTO 218	Automotive Engine Repair ⁴	3
AUTO 241	Suspension Design and Services.....	2
AUTO 225	Drivelines and Manual Transmissions	3
AUTO 282	Suspension Design and Services Lab .	1
PHYS 115	Basic Physics 2 (GER 2)	4
		17

SEMESTER IV

AUTO 212	Automotive Electrical Systems II	4
AUTO 214	Automotive Computer Systems	3
AUTO 230	Service Mgt. and Operations	1
AUTO 240	Hybrids and Electric Vehicles	3
AUTO 102 or 103	Diesel Engines or Automotive Air Conditioning ³	2
		13

- 1 Mathematics level depends on previous preparation. Applied College Mathematics (MATH 101) is the minimum requirement. Math 106 Intermediate Algebra or higher maybe substituted.
- 2 PHYS 121/125 – College Physics I lecture/lab may substitute if student meets prerequisites
- 3 Writing Intensive course

Student Learning Outcomes can be found at www.canton.edu/csoet/auto_tech.html.

ADDITIONAL GRADUATION REQUIREMENTS

Students must meet a minimum GPA of 2.0

Business: Accounting—AAS

The Associates in Applied Science degree program is a two-year program. Students learn the basics of financial accounting and real-world accounting practice from our faculty with professional working experience. The skill will be extended to tax preparation and information technology using the most recent accounting and tax software.

In addition, the two-year program In Accounting prepares graduates to continue their education in accounting or finance or business management four-year bachelor degree.

STUDENTS IN THIS MAJOR:

- Learn accounting theory, financial, managerial and cost accounting systems.
- Learn how accountants track, report, and interpret activity to allow for appropriate decisions by business, government, education, and individuals.
- Students have the opportunity to receive IRS approved training, to be certified in preparing taxes, and to volunteer through the only Volunteer Income Tax Assistance (VITA) site in St. Lawrence County.
- Students have the opportunity to learn real world accounting practice with simulations and QuickBooks, the current accounting software.

CAREER OPPORTUNITIES:

Graduates are able to disseminate financial information to public reporting entities and business decision makers. Opportunities in this field include:

- Private business and industry
- Public accounting agencies
- Governmental accounting positions
- Tax preparation
- Financial management

CAREER OUTLOOK:

Students with a degree in accounting are positioning themselves for career advancement and greater earning power. According to the Bureau of Labor Statistics, employment of accountants and auditors is projected to grow by 13% from 2012 to 2022. The accounting profession is committed to delivering a strong ethical foundation engaged in the preparation and examination of financial records, and a commitment to lifelong learning. The role of the

accountant is ever changing and integral to any business entity. See more compensation information from the website of U.S. Bureau of Labor Statics, Accountants and Auditors. <https://www.bls.gov/oes/current/oes132011.htm#st>

TYPICAL JOBS UPON GRADUATION:

- Staff Accountant
- Claims Adjustor
- Project Manager
- Credit Analyst
- Loan Specialist
- Account Clerk
- Tax Preparer
- Business Manager

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- St. Lawrence County
- Pinto, Mucenski & Watson PC
- United Helpers
- Home Depot
- Claxton-Hepburn Medical Center
- C. Rowe Accounting & Tax Preparation
- North Country Savings Bank
- SeaComm Credit Union
- Dragon Benware Crowley and Company PC
- Gray & Gray and Associates CPAs, P.C.

TRANSFER OPPORTUNITIES:

- Clarkson University
- SUNY Canton, SUNY Albany, SUNY IT, SUNY Plattsburgh, SUNY Potsdam, SUNY Oswego
- Siena College
- LeMoyne College
- Rochester Institute of Technology
- Syracuse University
- University of Vermont

Students wishing to transfer into a four-year program should consult their transfer school of choice prior to transfer.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).

PROGRAM REQUIREMENTS:

(CURRICULUM 0630)

SEMESTER I	CREDITS
FYEP 101 First Year Experience.....	1
ACCT 101 Foundations of Financial Accounting ¹	4
ECON 101 Macroeconomics.....	3
ENGL 101 Composition & the Spoken Word (GER 1,2)	3
CITA 110 Intro. to Information Technology	3
Mathematics* ² (GER 4)	3-4
	17-18

SEMESTER II

ACCT 102 Foundations of Managerial Accounting ¹	3
ECON 103 Microeconomics	3
Mathematics (GER 4) ²	3-4
BSAD 200 Business Communications**	3
Natural Sciences Elective (GER 5).....	3
	15-16

SEMESTER III

ACCT 300 Intermediate Accounting	3
ACCT 306 Cost Accounting.....	3
BSAD 201 Business Law I.....	3
DEISJ Elective (GER 3)	3
Program Elective.....	3
	15

SEMESTER IV

Accounting Electives (2)	6
FSMA 210 Introduction to Finance.....	3
Program Elective or GER (6,8,9,10,11) ^{3***}	3
General Elective or GER (6,8,9,10,11) ^{3***}	3
	15

**** Fulfills writing intensive requirement.**

GER = General Education Requirement

¹**Lowest acceptable grade 2.0.**

²**Lowest acceptable level: Intermediate Algebra (MATH 106). Math courses recommended: College Algebra and Statistics.**

³**Management or Finance Bachelor's Degree track: Seven GERs are required.**

A minimum cumulative GPA of 2.0 is required to remain in this program.

Accounting Electives: ACCT 242, 245, 302, 310, 335, 410, 430, or 440.

Program Electives: Courses in ACCT, BSAD, ECON, FSMA, and LEST.

³**GER = General Education Requirement;** students may take no more than one course per GER category. <http://www.canton.edu/gened/>

Student Learning Outcomes can be found at www.canton.edu/business/accounting.html.

Business Administration—AS, AAS

STUDENTS IN THIS MAJOR:

- Obtain a viable business background for immediate employment and/or transfer to a four-year program.
- Learn principles of business, accounting, and economics.

CAREER OPPORTUNITIES:

- Assistant Manager
- Advertising Representative
- Sales Representative
- Supervisor
- Customer Service Representative

CAREER OUTLOOK:

- With the importance of technology in the global economy, business positions are anticipated to increase.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Community Bank
- Wal-Mart
- New York State
- Canton-Potsdam Hospital
- St. Lawrence Health Alliance

TRANSFER OPPORTUNITIES:

- Eligible students may enroll in one of SUNY Canton's four-year business or management programs.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Composition & the Spoken Word (ENGL 101).

PROGRAM REQUIREMENTS:

AS DEGREE—TRANSFER PROGRAM (CURRICULUM 0671)

SEMESTER I	CREDITS
FYEP 101 First Year Experience***	1
ACCT 101 Foundations of Financial Accounting	4
BSAD 100 Introduction to Business	3
ECON 101 Macroeconomics (GER 7)	3
ENGL 101 Composition & the Spoken Word (GER 1,2)	3
Mathematics* (GER 4)	3-4
	<u>17-18</u>

SEMESTER II

ACCT 102 Foundations of Managerial Accounting	3
CITA 110 Intro. to Information Technology	3
ECON 103 Microeconomics	3
GER(6,8,9,10)	3
MATH 141 Statistics	3
	<u>15</u>

SEMESTER III

BSAD 200 Business Communications**	3
BSAD 201 Business Law I	3
Program Elective	3
DEISJ (GER 3)	3
Natural Sciences (GER 5)	3
	<u>15</u>

SEMESTER IV

FSMA 210 Introduction to Finance	3
Program Elective	3
Program Elective	3
GER (6,8,9,10)	3
GER 11	4
	<u>16</u>

*Survey of Mathematics (MATH 111), College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123) and Trigonometry (MATH 131), or Calculus (MATH 161)

**Fulfills writing intensive requirement.

***Required for Freshmen students only

GER = General Education Requirement - Students may take no more than one course per GER subject area

Program Electives: ACCT, BSAD, ECON, FSMA, or LEST

AAS DEGREE (CURRICULUM 632)

SEMESTER I	CREDITS
FYEP 101 First Year Experience***	1
ACCT 101 Foundations of Financial Accounting	4
BSAD 100 Intro. to Business	3
ECON 101 Macroeconomics (GER 7)	3
ENGL 101 Composition & the Spoken Word (GER 1,2)	3
Mathematics*	3-4
	<u>17-18</u>

SEMESTER II

ACCT 102 Foundations of Managerial Accounting	3
CITA 110 Intro. to Information Technology	3
ECON 103 Microeconomics	3
Natural Sciences Elective (GER 5)	3-4
Mathematics* (GER 4)	3-4
	<u>15-17</u>

SEMESTER III

BSAD 200 Business Communications**	3
BSAD 201 Business Law I	3
Program Elective	3
GER (6,8,9,10,11) OR	
Liberal Arts & Sciences Electives	3
DEISJ Elective (GER 3)	3
	<u>15</u>

SEMESTER IV

FSMA 210 Introduction to Finance	3
Program Elective	3
Program Elective	3
General Elective	3
GER (6,8,9,10,11) OR	
General Elective	3
	<u>15</u>

*Intermediate Algebra (MATH 106), Survey of Mathematics (MATH 111), College Algebra (MATH 121), Pre-Calculus (MATH 123), College Trigonometry (MATH 131), Statistics (MATH 141), or Calculus (MATH 161).

**Fulfills writing intensive requirement.

*** Required for all Freshmen

GER = General Education Requirement

Program Electives: ACCT, BSAD, ECON, FSMA, or LEST

Student Learning Outcomes can be found at www.canton.edu/business/bus_admin.html.

Civil Engineering Technology—AAS

Graduates of the Civil Engineering Technology program receive the Associate of Applied Science degree which enables them to go directly to work or transfer into a bachelor's degree program. Career options may be primarily office-based (drafting and design) or field-based (surveying, inspection, and construction management). Students are well prepared to meet the career challenges of the civil engineering and construction industries. Graduates may pursue a baccalaureate degree (Civil and Environmental Engineering Technology at SUNY Canton or elsewhere). Hands-on learning and extensive practical skills are emphasized in classes.

STUDENTS IN THIS MAJOR:

- Communicate effectively and professionally in the construction environment through proper use of verbal, written, and graphic techniques.
- Develop mathematical skills in algebra, trigonometry, and calculus, using analytical problem-solving methods.
- Employ logical and concise analytical techniques to solve technical problems.
- Demonstrate the capability to develop engineering drawings for construction projects.
- Demonstrate a thorough knowledge of common construction materials; both their proper use and their proper testing procedures.
- Understand the mechanics of structural design.
- Be proficient in the use of surveying equipment to collect data to lay out projects, and to solve engineering problems.
- Graduates will have developed the personal and academic skills required to pursue lifelong learning in, and beyond, the chosen major.

CAREER OPPORTUNITIES:

- Structural Steel Designer, Drafter, Estimator, Surveyor, Construction Superintendent, Construction Inspector, Materials Technician, Environmental Technician, Industrial Sales Representative, Residential/Commercial Contractor and General Contractor.

CAREER OUTLOOK:

- Nearly 100% of graduates willing to relocate/travel are able to establish civil engineering or construction-related careers.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

Graduates have gone to work at the following companies, as a few example: NYS Department of Transportation, Atlantic Testing Laboratories, CIVES Steel Corp. C&S Cos. General Contracting, Northeast Construction Services, Inc., Bette and Bring Construction Group, Advanced Testing Labs, Barrett Paving, Northland Construction, Stebbins Engineering, and Army Corps of Engineers.

TRANSFER OPPORTUNITIES:

Transfer Opportunities can be found at www.canton.edu/csoet/civil_eng.html and include SUNY Canton's Civil & Environmental Engineering Technology BTech degree.

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street, Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Pre-Calculus Algebra (MATH 123)

Students who do not meet the recommended high school math prerequisites may

still be admitted to the College, but completing the program may require more than two years.

PROGRAM REQUIREMENTS:

(CURRICULUM 0517)

SEMESTER I	CREDITS
ENGS 101 Intro to Engineering	2
SOET 116 Intro. to Computer Drawing	2
CONS 101 Elementary Surveying.....	4
MATH 123 Pre-Calculus ¹	4
ENGL 101 Composition and the Spoken Word.....	3
	15

SEMESTER II

CONS 203 Advanced Surveying	3
SOET 250 Intro 3D CADD and BIM	2
MATH 161 Calculus I ¹	4
PHYS 121/131 College/Univ. Physics I.....	3
PHYS 125/135 College/Univ. Physics I Lab.....	1
GER (6,7,8, 9, 10 or 11).....	3
	16

SEMESTER III

ENGS 201 Statics	3
CONS 280 Civil Engineering Materials	3
CONS 222 Construction Estimating	2
PHYS 122/132 College/Univ. Physics II	3
PHYS 126/136 College/Univ. Physics II Lab.....	1
Diversity GER (3)	3
	15

SEMESTER IV

Technical Program Elective ³	3
CONS 216 Soils In Construction ²	4
CONS 322 Hydraulics	4
CONS 274 Construction Management.....	3
ENGS 203 Strength of Materials for Tech.....	3
CONS 275 Strength of Materials Lab	1
	18

Total Required Program Credits = 64

1 MATH: If entering at MATH 161 they will complete MATH 161 and MATH 162.

2 Writing Intensive

3 Must be approved technical program elective with CONS or CIVL course designator, or approved by advisor/departement chair.

Student Learning Outcomes can be found at www.canton.edu/csoet/civil_eng.html

ADDITIONAL GRADUATION REQUIREMENTS

Students transferring a significant number of credits from outside must complete the designated "Capstone" course at SUNY Canton, and the student's transfer records must have been reviewed and approved by the CET Department Chair.

Computer Information Systems—AAS

The Associate in Applied Science (A.A.S.) degree in Computer Information Systems (CIS) prepares students for work with computer systems, databases, networks, and web development. Graduates acquire the knowledge and experience needed for careers in the computer industry and may pursue a Bachelor of Technology degree in Information Technology through a four-year program requiring two additional years of study. The courses are offered on-campus, online, or in a hybrid format, providing flexible options that accommodate each student's individual circumstances.

STUDENTS IN THIS MAJOR:

- Preparation for In-Demand IT Careers: Development of the knowledge, technical skills, and work ethic required for a wide range of entry-level positions in the computer industry.
- Hands-On, Real-World Learning: Gain practical experience using well-equipped, on-site, and remotely accessible campus computers.
- Development of Professional Skills: Emphasis on teamwork and effective communication, essential in today's IT environments.
- Flexible Degree Options: A variety of electives available for both on-campus and online study.
- Clear Transfer Opportunities: Defined pathway to bachelor's degree program in Information Technology.

CAREER OPPORTUNITIES:

- IT Support Specialist / Help Desk Technician
- System Technician or Junior System Administrator
- Network Technician or Junior Network Administrator
- Technical Sales or Customer Support Representative
- Cybersecurity Technician (with electives in CYBR)
- Junior Programmer

CAREER OUTLOOK:

- Computer Information Systems is expected to continue as a strong growth area for career opportunities.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Alcoa, Inc.

- AmeriCU
- BOCES
- Clarkson University
- Claxton Hepburn Hospital
- Corning
- Ellucian Software
- Hyatt Hotels Corporation
- REDCOM Laboratories
- SUNY Canton
- St. Lawrence University
- Whiteface Lodge
- Xerox

TRANSFER OPPORTUNITIES:

- Information Technology Program
- Industrial Technology Management Program

ADMISSION REQUIREMENTS:

- Applicants should demonstrate readiness for Intermediate Algebra (MATH 106) and Composition and the Spoken Word (ENGL 101). In-coming freshmen will be assessed for appropriate placement in English and math courses.
- High school computer coursework is beneficial but not required for admission.
- Transfer applicants must have a minimum cumulative GPA of 2.0.
- Meeting all prerequisites is recommended; however, applicants who do not meet them may still be admitted. In such cases, additional coursework may be required, potentially extending the program beyond two years.

PROGRAM REQUIREMENTS:

(CURRICULUM 0581-01)

SEMESTER I	CREDITS
BSAD 100 Introduction to Business.....	3
CITA 163 Survey of Information Technology ¹ ...	3
CITA 152 Computer Logic ¹	3
ENGL 101 Composition & Spoken Word.....	3
GER - Mathematics Quantitative Reasoning ⁴	3
	15

SEMESTER II

CITA 170 Comp. Concepts & Oper. Sys	3
CITA 175 Comp. Concepts & Oper. Sys Lab ³ ...	1

CITA 171 Oper. Sys. Use & Administration	3
CITA 202 Computer User Support ⁷	3
SPCH 104 Introduction to Speech ⁵	3
GER Elective (Math/Science)	3
	16

SEMESTER III

ACCT 104 Survey of Accounting ⁶	4
CITA 220 Data Comm and Network Tech.....	3
CITA 221 Data Comm and Net. Tech Lab ³	1
ECON 101 Macroeconomics OR	
ECON 103 Microeconomics	3
2-CIS Program Electives: SOET, Business School, CYBR, DATA, GAME, and GMMD	6
	17

SEMESTER IV

CITA 250 Information Security	3
GER - Social Science	3
CIS Program Electives: SOET, Business School, CYBR, DATA, GAME, and GMMD	3
Elective Liberal Arts.....	3
GER - Diversity: Equity, Inclusion, and Social Justice	3
	15

* *Fulfills writing intensive requirement.*

Student Learning Outcomes can be found at www.canton.edu/csoet/com_inf_sys.html.

Although there are several modern well-equipped computer labs on campus, it is expected each student has a personal computer.

NOTE

1. To be eligible for graduation, all CITA courses must be completed with a grade of C or higher, or must be accepted as transfer credits
2. A maximum of three (3) CITA credits from courses numbered below CITA 150 can be counted towards graduation.
3. Online students can substitute CITA 175 and CITA 221 credits with two (2) lower-level program elective credits (CITA/CYBR/DATA).
4. The minimum required math course is MATH 106. For those planning to continue in the IT program, MATH 121 or higher is recommended.
5. For those planning to continue in the IT program, BSAD 200 is recommended.
6. For those planning to continue in the IT program, ACCT 101 is recommended.
7. Writing intensive course

ADDITIONAL GRADUATION REQUIREMENTS

Each CITA course applied toward graduation requirements must be completed with a grade of "C" or higher. Transfer students must complete a minimum of two CITA courses (totaling at least six credit hours) at the 200 level or above that are applicable to the degree.

Construction Technology: Management—AAS

This program prepares students for careers in construction by blending hands-on construction skills with project planning, management and estimating. Students are also exposed to accounting, bidding, drafting, and business organization and management. Graduates with the Construction Technology: Management, AAS (Associate of Applied Science) degree have the option of completing a four-year degree with two more years of study; Industrial Technology Management (B. Tech.) is one possible track.

STUDENTS IN THIS MAJOR:

- Learn fundamental construction techniques through hands-on experience and classroom teaching.
- Conduct construction material testing (eg: steel, soils, concrete) using industry-standard equipment.
- Experience an academic program that blends the fields of construction, business, and management.
- Develop computer software skills, project scheduling techniques, and construction methods utilized in the management of construction projects.

CAREER OPPORTUNITIES:

- Construction Project Manager Assistant
- Estimator
- Project Planning and Scheduling
- Construction Equipment Salesperson
- Residential Contractor
- Commercial Contractor
- Purchasing Agent
- Code Enforcement Officer
- Insurance Adjustor

CAREER OUTLOOK:

- Career opportunities currently exist at all levels of the construction industry.

- Infrastructure rehabilitation should maintain the need for construction technicians and assistant project managers.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

Graduates have gone to work at the following companies, as a few example: Atlantic Testing Laboratories, CIVES Steel Corp. C&S Cos. General Contracting, Northeast Construction Services, Inc., Advanced Testing Labs, Barrett Paving, Northland Construction, Tuscarora Construction, and Jeffords Steel Inc.

TRANSFER OPPORTUNITIES:

- SUNY Canton (B. Tech. in Industrial Technology Management)
- SUNY Alfred (BS, BT in Construction Management)

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Applied College Mathematics (MATH 101) or Intermediate Algebra (MATH 106)

Students who do not meet the recommended high school math prerequisites may still be admitted to the College, but completing the program may require more than two years.

PROGRAM REQUIREMENTS:

(CURRICULUM 1162)

SEMESTER I	CREDITS
CITA 108 Intro to Spreadsheets	1
FYEP 101 First Year Experience.....	1
CONS 112 Wood Structures.....	3
SOET 116 Intro. to Computer Drawing.....	2
BSAD 100 Intro to Business.....	3
ENGL 101 Composition and the Spoken Word .3	
MATH 106 Intermediate Algebra	3
	15

SEMESTER II

CONS 111 Commercial Structures.....	3
CONS 132 Construction Drafting.....	3
CITA 109 Intermediate Spreadsheets.....	1
PHYS 115 Basic Physics.....	4
MATH 123 Pre-Calculus ¹	4
	14

SEMESTER III

CONS 101 Elementary Surveying.....	4
CONS 222 Construction Estimating	2
CONS 280 Civil Engineering Materials	3
BSAD 201 Business Law I.....	3
ACCT 104 Survey of Accounting OR	
ACCT 101 Foundations of Financial Acct.	4
	16

SEMESTER IV

CONS 274 Construction Management.....	3
CONS 216 Soils in Construction ²	4
Diversity GenEd Elective (GER 3) ...	3
GenEd Elective	
(GER 6, 7, 8, 9, 10, or 11)	3
Liberal Arts Elective	3
	16

Total Required Program Credits = 63

¹ The student will be leveled into the appropriate MATH class. MATH 123 is the minimum level of mathematics required for the program. If entering at MATH 106, students will take MATH 106 and MATH 123. If leveled into MATH 123, students will take MATH 123 and then a liberal arts elective of choice.

² Writing Intensive Course.

Student Learning Outcomes can be found at www.canton.edu/csoet/const_mgt.html.

ADDITIONAL GRADUATION REQUIREMENTS

Students must have completed a minimum of nine CONS credits at SUNY Canton. Student transfer records must be reviewed and approved by the program director.

Criminal Justice—AAS

The program offers three distinct learning tracts which allows the student the opportunity to tailor their coursework for future career aspirations:

- Law Enforcement
- Corrections
- Generalist

Students are provided a solid academic foundation that allows them to seamlessly transfer into any of our B. Tech majors in Criminal Investigation, Homeland Security or Criminal Justice: Law Enforcement Leadership.

STUDENTS IN THIS MAJOR:

- Acquire the basic knowledge for a broad view of criminal justice which could support either a career in criminal justice OR further academic study in his field.
- Have their needs met by choosing the delivery format for the courses that best fits their lifestyles. The coursework is available in both a traditional classroom format and in an online format.

CAREER OPPORTUNITIES:

- Police Officer
- Corrections Officer
- Private Security
- Loss Prevention Officer

CAREER OUTLOOK:

- U.S. Department of Labor forecasts that the growth rate until 2033 is approximately 4%. The average starting pay is approximately \$45,000 which is higher than the overall average pay of all occupations tracked by the D.O.L.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Federal Bureau of Investigations (FBI)
- Secret Service
- U.S. Customs & U.S. Border Patrol
- New York State Department of Environmental Conservation

- New York State University Police
- New York State Police
- New York Department of Corrections
- Military Police of the Armed Forces
- United Parcel Service
- Pinkerton Security
- Sheriff's Department
- Municipal Police Departments
- Vermont State Police

TRANSFER OPPORTUNITIES:

- Fifty to sixty percent of AAS graduates seek baccalaureate degrees. The majority of these students remain at SUNY Canton and pursue one of the baccalaureate degrees due to the hands-on aspects of our B. Tech degrees.

ADMISSION REQUIREMENTS:

- Students must be prepared to take Intermediate Algebra (MATH 106)
- Students must be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must have at least a 2.0 GPA.

PROGRAM REQUIREMENTS:

(CURRICULUM 0640)

SEMESTER I CREDITS

JUST 101	Intro. to Criminal Justice.....	3
ENGL 101	Composition and the Spoken Word.....	3
CITA 110	Intro. to Information Technology.....	3
MATH 106	Intermediate Algebra**.....	3
PSYC 101	Introductory Psychology.....	3
		<u>15</u>

SEMESTER II

JUST 105	Correctional Philosophy.....	3
JUST 112	Criminal Law and Procedure.....	3
SOCI 101	Introduction to Sociology.....	3
	Humanities Elective (GER).....	3
	Natural Science w/Lab (GER).....	3-4
		<u>15-16</u>

EMPHASIS A: LAW ENFORCEMENT

SEMESTER III

JUST 201	Critical Issues in Crim. Justice *.....	3
JUST 209	Law Enforce. Communications.....	3

American History Elective (GER).....	3
Lib. Arts Elective (any GER).....	3
General Elective.....	<u>3</u>
	<u>15</u>

SEMESTER IV

JUST 203	Criminal Investigation.....	3
JUST 207	Police Services.....	3
JUST 210	Intro to Forensic Investigations.....	3
JUST 204	Crime and Media.....	3
	Lib. Arts Elective (any GER).....	3
		<u>15</u>

OR

EMPHASIS B: CORRECTIONS PROFESSIONS

SEMESTER III

JUST 201	Critical Issues in Crim. Justice *.....	3
JUST 211	Diagnostic Eval of Offender.....	3
	American History Elective (GER).....	3
JUST 204	Crime and Media.....	3
	General Elective.....	<u>3</u>
		<u>15</u>

SEMESTER IV

JUST 215	Community Based Corrections.....	3
JUST	Program Elective.....	3
JUST	Program Elective.....	3
PSYC 275	Abnormal Psychology.....	3
SSCI 181	Alcohol Drugs & Society.....	3
		<u>15</u>

OR

EMPHASIS C: CRIMINAL JUSTICE GENERALIST

SEMESTER III

JUST 201	Critical Issues in Crim. Justice *.....	3
JUST 209	Law Enforce. Communications OR	
JUST 211	Diagnostic Eval of Offender.....	3
	American History Elective (GER).....	3
	Lib. Arts Elective (any GER).....	3
	General Elective.....	<u>3</u>
		<u>15</u>

SEMESTER IV

JUST	Program Elective.....	3
JUST	Program Elective.....	3
JUST	Program Elective.....	3
JUST 204	Crime and Media.....	3
	Lib. Arts Elective (any GER).....	3
		<u>15</u>

* *Fulfills writing intensive requirement.*

GER = General Education Requirement

** *Intermediate Algebra (MATH 106) is the minimum level acceptable toward AAS degree. Survey of Mathematics (MATH 111) or College Algebra (MATH 121) is minimum for B. Tech. degrees.*

--Introduction to Criminal Justice should be taken as soon as possible.

--Early American History (HIST 103) or Modern US History (HIST 105) is recommended for American History elective.

--A minimum of 60 credit hours with a 2.0 GPA is required to receive the AAS degree in Criminal Justice. Students must take all of the PROGRAM courses and all courses in Emphasis A, Emphasis B, OR Emphasis C (**NOT ALL THREE**).

Early Childhood—AS

STUDENTS IN THIS MAJOR:

- Enroll in a course of study offering 12 courses specific to early childhood care and education along with general liberal arts courses leading to an associate of science degree
- Participate in early childhood field-based experiences in various childcare settings, including Head Start Programs, Universal Pre-K, and Kindergarten Public School Classrooms, Child Care Centers, Family Child Care Provider Homes, Nursery, and Pre-School programs, and various Children's Organizations [museums/libraries].
- Take part in professional development opportunities offered through, seminars, trainings, workshops, and conferences.
- Have access to various learning resources, activity kits, and equipment in our state-of-the-art Early Childhood Undergraduate Teacher Center & Classroom located in Cook Hall.
- Prepare for rewarding careers in Early Care and Education or continue academic studies by enrolling in our Bachelor of Business Administration in Early Childhood Care and Management, or transfer to various 4-year degree Programs.

PROGRAM DELIVERY:

The Associate of Science Degree in Early Childhood can be completed fully online, on campus, or a combination of both. Students can begin enrollment in fall, summer, or spring and attend part or full-time.

CAREER OPPORTUNITIES:

- Pre-School and Child Care Center Lead Teacher, Assistant Teacher
- Public School: Teacher Assistant
- Head Start: Lead Teacher, Asst. Teacher
- Self Employed: Child Care or Nursery School Owner
- Family Child Care Home-Based Provider

CAREER OUTLOOK:

- U.S. Department of Labor projects employment of Preschool Teachers, and Teacher Assistants to grow by 4% from 2019-2029, about as fast as the average for all occupations.
- Certification requirements are increasing for

Early Care and Education providers. Associate and bachelor's Degrees are necessary to work in lead positions in childcare facilities and Head Start programs.

- Changes in society and the workforce demand an increase in the availability of high-quality early childcare and education options for families and children from infancy to pre-kindergarten.

TRANSFER OPPORTUNITIES:

SUNY Canton, BBA in Early Childhood Care and Management.....Earn 2 degrees in 4 years!

SUNY Canton Early Childhood graduates attend:

- *SUNY Cobleskill, SUNY Plattsburgh, SUNY Oneonta, SUNY Cortland, SUNY Albany, SUNY Cobleskill*
- *SUNY Brockport, SUNY Potsdam, Empire State*

ADMISSION REQUIREMENTS:

- Students must meet entrance requirements and be eligible for enrollment in: Composition & the Spoken Word (ENGL 101).
- Transfer students must have a minimum 2.0 GPA for admittance to the ECHD major.
- Prior Learning Credit and/or Course Substitution Options for students working in licensed childcare centers 20+ hours weekly
- Students who do not meet ECHD admission requirements may enroll in preparatory courses. Students must pass all *preparatory courses and have a minimum 2.0 GPA for admittance to the ECHD program.
- Graduates of BOCES Early Childhood Occupations programs *may* be eligible for 3–6 college credits toward the Early Childhood Program at SUNY Canton. Refer to the College catalog for a list of BOCES Programs for which we have articulation agreements.

PROGRAM REQUIREMENTS:

- Students are required to complete NYS Office for Children Trainings: Mandated Reporter Identification of Child Abuse & Neglect and Building on the Foundations in Health, Safety & Nutrition [Included in ECHD 121 course content]

- Early Childhood students must complete a Health Clearance through the SUNY Canton Davis Health Center; have evidence of a recent physical exam, and updated immunizations.
- For off campus field experiences (ECHD 201) residential students will need to arrange for coordination of and/or transportation to their assigned placement sites. Distance/Online students will complete field experiences in centers and programs near their residence and attend seminars virtually.

(CURRICULUM 1327)

SEMESTER I	CREDITS
FYEP 101 First Year Experience	1
ECHD 101 Intro. to Early Childhood (GER 7) ..	3
ENGL 101 Composition & the Spoken Word	3
PSYC 101 Introduction to Psychology.....	3
Science Elec. (GER 5)	3-4
DEISJ Elective (GER 3)	3
	16-17

SEMESTER II

ECHD 121 Wellness in Young Children.....	3
ECHD 131 Infants and Toddlers	3
PSYC 220 Child Development.....	3
Math Elective (GER 1)	3
GER (6,8,9,10,11)	3
	15

SEMESTER III

ECHD 105 Orientation to EC Field Experience..	1
ECHD 125 Curriculum Development.....	3
ECHD 250 Children with Special Needs.....	3
ECHD 285* Iss. & Policies in Early Care & Ed.* ..	3
GER (6,8,9,10,11)	3
General Elective.....	3
	16-17

SEMESTER IV

ECHD 201 Early Childhood Field Experiences w/Seminar	4
ECHD 204 Early Childhood Observation.....	3
ECHD 200 Planning Programs for Young Children	3
General Elective.....	3
General Elective.....	3
	16

* *Fulfills writing intensive requirement.*

GER = General Education Requirement

NOTE: Early Childhood students must meet seven out of ten General Education Requirements.

Student Learning Outcomes can be found at www.canton.edu/business/early_childhood/.

Electrical Engineering Technology—AAS

The Electrical Engineering Technology (EET) program prepares students for a wide range of opportunities ranging from manufacturing and defense to power generation and computing. At completion, graduates receive the Associate in Applied Science degree and have considerable flexibility for continuing their education or commencing their career directly. Math skills and an interest in science are expected, and the student will receive extensive hands-on experience in a small class setting. Graduates are qualified to work as Engineering Technicians, or continue in the four year EET program (B. Tech.), and will have the flexibility to a number of elective courses including Mathematics as minor.

PROGRAM EDUCATIONAL OBJECTIVES

- (1) Provide industry with well qualified technicians for entry level positions in the Electrical Engineering Technology field;
- (2) Provide transferability for students who are interested in baccalaureate degree programs at SUNY Canton or other institutions with related programs;
- (3) Be ready to expand knowledge in engineering profession through continuing education, or other lifelong learning experiences;
- (4) Be committed to quality, timeliness and respect for diversity.

STUDENT LEARNING OUTCOMES

What students are expected to know and be able to do by the time of graduation:

- (1) An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
- (2) An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
- (3) An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature
- (4) An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results; and
- (5) An ability to function effectively as a member of a technical team.

CAREER OPPORTUNITIES:

More than 90% of the graduates go directly into positions like:

- Project Control Technician
- Electronic Maintenance Technician

- Production Technician
- Field Service Technician
- Systems Test Technician
- Quality Assurance Technician
- Field Project Technician
- Instrumentation Technician
- Electrical Power Technician
- Communications Technician

CAREER OUTLOOK:

The demand for Electrical Engineering Technicians is immense. There simply are not enough qualified technicians entering the market place, and a large number of working technicians are approaching retirement age.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Brookfield Power
- Novelis
- Schlumberger
- Siemens
- National Grid
- ALCOA
- Schneider Packing Equipment
- Corning
- New York Power Authority
- TRC
- C & S Engineers, Inc.
- NYSEG
- Verizon

BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING TECHNOLOGY OPPORTUNITY:

- Graduate from the AAS degree in Electrical Engineering Technology may continue in the B. Tech degree program, and all courses are transferred into the Bachelor's Degree program to allow student to complete his/her studies in two years.

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Pre-Calculus Algebra (MATH 123)
- Students who do not meet the required high school mathematics prerequisites may still be admitted to the College, but they will have to complete all mathematics requirements before admission to this program, or they may complete one year certificate before starting the degree program.

PROGRAM REQUIREMENTS: (CURRICULUM 0699)

SEMESTER I	CREDITS
ELEC 101 Electric Circuits I	3
ELEC 109 Electric Circuits I Laboratory	1
ELEC 161 Electronic Fabrication	2
SOET 116 Intro to CAD and Design	2
ENGL 101 Composition & the Spoken Word	3
MATH 123 Pre-Calculus Algebra	4
FYEP 101 First Year Experience	1
	16

SEMESTER II

ELEC 102 Electric Circuits II	3
ELEC 129 Electric Circuits II Laboratory	1
ELEC 141 Industrial Controls	2
ELEC 165 Digital Fund & Systems	3
ELEC 166 Digital Fund & Systems Lab	1
	Diversity Elective Course(GER 3)3
MATH 161 Calculus I	4
	17

SEMESTER III

ELEC 213 Microprocessors *	3
ELEC 215 Electrical Energy Conversion	4
ELEC 231 Electronic Circuits	4
ENGS 102 Programming for Engineers	2
PHYS 121/131 College Physics I OR	
University Physics I	3
PHYS 125/135 Physics Lab I	1
	17

SEMESTER IV

ELEC 203 Engineering Technology Project	1
ELEC 225/383 Telecommunications OR	
Power Transmission & Distribution	3
ELEC 332 Industrial Electronics	3
ELEC 243 Computer Auto Control Systems	2
PHYS 122/132 College Physics II OR	
University Physics II	3
PHYS 126/136 Physics Lab II	1
SOET 377 *Engineering Ethics	1
	14

❖ *Though Engineering Safety is not required for AAS curriculum, Advisory Board suggest it will be helpful for a student to consider taking Engineering Safety Course SOET 349 or SOET 348.*

** Fulfills writing intensive requirement.*

Student Learning Outcomes can be found at www.canton.edu/csoet/elec_eng_tech/.

ADDITIONAL GRADUATION REQUIREMENTS

Students transferring in Electrical 200 level courses must complete a minimum of 12 credits of 200 level courses contained in the current Electrical Engineering Technology curriculum with a minimum GPA of 2.0 for all such credits taken.

Engineering Science—AS

The Engineering Science program prepares its graduates to complete a baccalaureate engineering degree with another two years of study. Applicable areas include mechanical, electrical, civil, and aeronautical engineering. A key difference with Engineering Science, as differentiated from other programs in the Canino School of Engineering Technology, is that this program provides a strong theoretical preparation rooted in calculus for students who seek to prepare for engineering design responsibilities. Graduates perform exceptionally well when transferring to engineering schools such as Clarkson, Cornell or RPI.

STUDENTS IN THIS MAJOR:

- Complete their first two years at SUNY Canton and then transfer to a four-year engineering school to complete their baccalaureate degree.
- Interact with faculty on a daily basis because of small class sizes.
- Are accepted by most four-year engineering schools with full junior status.
- Have the benefit of SUNY Canton's membership in the SUNY Two-Year Engineering Science Association (TYESA) of New York State. This membership assures that SUNY Canton's Engineering Science program is rigorous and allows for smooth transfer to four-year schools.

CAREER OPPORTUNITIES:

After transferring to and graduating from a four-year school, any engineering career is possible. Typical opportunities include:

- Aeronautical Engineer
- Civil Engineer
- Computer Engineer
- Electrical Engineer
- Engineering Management
- Mechanical Engineer
- Chemical Engineer

CAREER OUTLOOK:

- There are favorable job opportunities for engineering-related positions.
- Employment opportunities in engineering have been good for a number of years and are expected to continue.

TRANSFER OPPORTUNITIES:

In recent years, Engineering Science students have transferred to:

- Carnegie Mellon University
- Clarkson University
Dual Admission Available - Earn an Associates at SUNY Canton and a Bachelor's at Clarkson University.
- Cornell University
- Florida Institute of Technology
- Northeastern University
- Pennsylvania State University
- Rensselaer Polytechnic Institute
- SUNY Binghamton
- SUNY Buffalo
- Syracuse University
- University of Massachusetts
- University of North Carolina

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Calculus I (MATH 161)

PROGRAM REQUIREMENTS:

(CURRICULUM 0530)

This program has been granted a SUNY General Education waiver which allows the program to require only five General Education Requirements. Care must be taken to select courses in areas which meet this requirement.

SEMESTER I

ENGS 101	Introduction to Engineering.....	2
CHEM 150	College Chemistry I.....	4
ENGL 101	Composition & the Spoken Word....	3

CREDITS

MATH 161	Calculus I.....	4
PHYS 131	University Physics I.....	3
PHYS 135	University Physics Lab I.....	1
		17

SEMESTER II

ENGS 102	Programming For Engineers.....	2
CHEM 155	College Chemistry II.....	4
Diversity Elective (GER 3).....		3
MATH 162	Calculus II.....	4
PHYS 132	University Physics II.....	3
PHYS 136	University Physics Lab II.....	1
		17

SEMESTER III

ENGS 201	Statics.....	3
ENGS 205	Nature & Properties of Materials.....	3
MATH 263	Calculus III.....	4
ECON 103	Principle of Microeconomics.....	3
Program Elective *.....		3
		16

SEMESTER IV

ENGS 202	Dynamics.....	3
ENGS 263	Electric Circuits.....	3
ENGS 264	Electric Circuits Lab.....	1
Program Elective **.....		3
MATH 364	Differential Equations.....	4
		14

Student Learning Outcomes can be found at
www.canton.edu/csoet/eng_sci.html.

General Technology–AAS

The General Technology (GT) curriculum serves needs of entering students in three broad ways. First, its curricular breadth and flexibility allows entering students to explore across a range of technology disciplines as they seek to identify a specific concentration path of interest. Second, GT enables students transferring from other academic programs or institutions to build upon academic work already accomplished. Third, this program is appropriate for students seeking a two-year degree in an unusual area of specialization for which dedicated programs may not conveniently exist (e.g. electronic testing, project planning & scheduling, quality control, plant operations & maintenance).

Graduates of this program may pursue employment upon graduation or continue their education with the pursuit of a subsequent baccalaureate (four-year) degree with a program such as Industrial Technology Management. This broad-based program is ideal for individuals with analytical capabilities seeking to pursue a path of study that serves the individual's particular interests well.

STUDENTS IN THIS MAJOR:

- Will have the flexibility to explore career interests in various technical disciplines.
- Will be able to focus their studies within their specific area(s) of interest.
- Will develop a strengthened preparation in mathematics, science, and technology.
- Are able to build upon academic work already completed in other related areas.

CAREER OPPORTUNITIES:

Employment opportunities are broad for technology and span the range of industry and commerce. Because of the broad flexibility of this program, it is important for the student and academic advisor to carefully plan the selection of program electives that will best serve the career interests of the

individual student. Opportunities in this market include:

- Manufacturing & Production
- Industrial Distribution
- Technical Sales and Services
- Pursuit of additional (four-year) education (e.g. Business, Information Technology, Industrial Technology Management)

ADMISSION REQUIREMENTS:

Incoming students will meet all general admission requirements as freshmen to SUNY Canton, having completed the NYS Geometry Regents or Math A plus one year. Transfer students will be evaluated individually by the program academic advisor. The mathematics requirements will ensure that entering students are prepared to commence studies at a minimum level of College Algebra (MATH 121) and College Physics I (PHYS 121).

PROGRAM REQUIREMENTS:

(CURRICULUM 2208)

SEMESTER I CREDITS

ENGS 101	Introduction to Engineering	2
	Technical Design OR Drafting	2-3
ENGL 101	Composition and the Spoken Word..	3
MATH 123	Pre-Calculus Algebra	4
PHYS 121	College Physics I	3
PHYS 125	Physics I Lab	1
		<u>15-16</u>

SEMESTER II

ENGS 102	Programming for Engineers	2
MECH 128	Electromechanical Technology	3
	GER 3 - Diversity Elective.....	3
	Math Elective**	4
	Science Elective w/lab	4
		<u>16</u>

SEMESTER III

	Program Elective***	9
	Math Elective **	3
	Humanities Elective	3
		<u>15</u>

SEMESTER IV

	Program Electives***	12
	General Elective.....	3
		<u>15</u>

*Fulfills writing intensive requirement.

** College Algebra (MATH 121) or equivalent, & at least one calculus course are required. Entering students who are unprepared to enroll in MATH121 or equivalent may require extra time to graduate.

*** Program Electives are to be selected with the approval of the student's academic advisor from the following disciplines: ACHP, AREA, ASTR, AUTO, CHEM, CITA, CONS, ENGS, ESCI, TMMA, GEOL, GMMD, MECH, MFGT, MATH, MSPT, PHYS, and SOET.

Student Learning Outcomes can be found at www.canton.edu/csoet/general.html.

HVAC Engineering Technology–AAS

SUNY Canton is a leader in air conditioning education, and this program is well-suited for individuals with an interest in energy and technology. With energy costs at their current level, this program leads to employment opportunities across the U.S. and around the globe. It also provides excellent preparation for entry into baccalaureate programs such as Mechanical Technology, Alternative and Renewable Energy Systems or Industrial Technology Management at SUNY Canton. Students also pursue baccalaureate degrees at other institutions.

STUDENTS IN THIS MAJOR:

- Communicate effectively and professionally in the building environment through proper use of verbal, written, and graphic techniques.
- Develop mathematical skills in algebra, trigonometry, and calculus, using analytical problem solving methods.
- Be proficient and apply mathematics, fluid mechanics, thermodynamics, and principle of heat transfer to air conditioning designs.
- Employ logical and concise analytical techniques to solve technical problems.
- Demonstrate the capability to develop engineering drawings for HVAC projects.
- Develop skills using specific codes, ASHRAE standards and handbooks.
- Demonstrate a thorough knowledge of HVAC components and how to use as a system to maintain design conditions.

CAREER OPPORTUNITIES:

- Service Technicians
- HVAC Contractors
- Designers
- HVAC Sales
- Controls Specialists
- Facilities Management

CAREER OUTLOOK:

- All graduating students seeking employment in the past two years have accepted employment by the first of June after graduation.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Day Automation Systems
- Prax Air, Inc.
- Pro Air Plus
- Siemens
- T.P. Woodside, Inc.
- Bomac
- Hyde-Stone
- DeLaval
- GEMMA Power Systems

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Pre-Calculus Algebra (MATH 123)

PROGRAM REQUIREMENTS:

(CURRICULUM 0444)

SEMESTER I	CREDITS
ENGS 101 Introduction to Engineering.....	2
ENGL 101 Composition & Spoken Word.....	3
MATH 123 Pre-Calculus Algebra	4
SOET 116 Computer Drafting	2
PHYS 121/131 College or University Physics I.....	3
PHYS 125/135 College or Univ. Physics Lab I.....	1
	15

SEMESTER II

GER 6 Humanities Elective GER 6.....	3
MATH 161 Calculus 1	4

HVAC 101 Refrigeration I Lab	2
HVAC 102 Refrigeration I Lab	2
SOET 250 Intro to 3D CAD and BIM.....	2
CITA 220 Data Comm. and Networking.....	3
CITA 221 Data Comm. and Networking Lab ...	1
	17

SEMESTER III

ACHP 243 Air Conditioning I.....	3
ACHP 253 Domestic and Comm. Heating I.....	4
HVAC 201 HVAC Electrical and Motor Controls	2
HVAC 202 HVAC Electrical and Motor Controls Lab	2
MECH 241/ENGS 314 Fluid Mechanics	3
HVAC 110 Plumbing.....	3
	17

SEMESTER IV

ACHP 254 Domestic and Comm. Heating II.....	4
ACHP 264 Air Conditioning System Design	1
PHYS 122/133 College or University Physics II.....	3
PHYS 126/136 College or Univ. Physics Lab II.....	1
ACHP 201 Building Controls.....	3
GER 3 GER Elective Diversity	3
	15

**Fulfills writing intensive requirement.*

Student Learning Outcomes can be found at
www.canton.edu/csoet/air_cond.html.

ADDITIONAL GRADUATION REQUIREMENTS

Students must have completed while at SUNY Canton, 12 credits of 200 level courses, including ACHP 264, contained in the current HVAC ET curriculum and earning a minimum GPA of 2.0 for all such credit hours taken while under the direct advisement of the program faculty.

HVAC Trades–AOS

There's a growing demand nationwide for technicians specializing in heating, ventilation, air conditioning (HVAC) and refrigeration. Climate-control systems are becoming increasingly sophisticated, necessitating the need for advanced training.

Courses in the new major include hands-on labs specializing in the installation, troubleshooting and repair of HVAC systems, in addition to computers, motor controls, commercial refrigeration, and plumbing. It will also incorporate business and humanities courses to further prepare students for their professional careers.

With energy costs at their current level, this program leads to employment opportunities across the U.S. and around the globe. It also provides excellent preparation for entry into baccalaureate programs such as Industrial Technology Management at SUNY Canton. Students also pursue baccalaureate degrees at other institutions.

STUDENTS IN THIS MAJOR:

- Communicate effectively and professionally in the building environment through proper use of verbal, written, and graphic techniques.
- Develop mathematical skills in algebra, trigonometry, and calculus, using analytical problem solving methods.
- Be proficient and apply mathematics, fluid mechanics, thermodynamics, and principle of heat transfer to air conditioning designs.
- Employ logical and concise analytical techniques to solve technical problems.
- Demonstrate the capability to develop engineering drawings for HVAC projects.
- Develop skills using specific codes, ASHRAE standards and handbooks.
- Demonstrate a thorough knowledge of HVAC components and how to use as a system to maintain design conditions.

CAREER OPPORTUNITIES:

- Service Technicians
- HVAC Contractors
- Designers
- HVAC Sales
- Controls Specialists

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Day Automation Systems
- Prax Air, Inc.
- Central New York Trane
- Siemens
- Thomas Associates
- T.P. Woodside, Inc.
- Galson Engineering
- Bomac
- Hyde-Stone
- NEPCO
- GEMMA Power Systems

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Refer to the table of high school course prerequisites for admission.
- Students must be qualified to enter Intermediate Algebra (MATH 106)

PROGRAM REQUIREMENTS:

(CURRICULUM 2953)

SEMESTER I	CREDITS
MATH 106 Intermediate Algebra	3
ENGL 101 Composition and the Spoken Word (GER 1&2)	3
HVAC 103 Hydronics.....	3
HVAC 104 Hydronics Lab	2
CONS 151 Building Trades – Blueprint Reading & Drafting.....	2
HVAC 110 Plumbing.....	3
	16

SEMESTER II

HVAC 101 Refrigeration I	2
HVAC 102 Refrigeration I Lab	3
HVAC 105 Forced Air Systems	3
HVAC 106 Forced Air Systems Lab	2
CITA 110 Intro to Info. Technology.....	1
Liberal Arts Elective.....	3
	14

SEMESTER III

HVAC 201 HVAC Elec. and Motor Control	2
HVAC 202 HVAC Elec. Motor Controls Lab	2
HVAC 203 Commercial Refrigeration	2
HVAC 204 Commercial Refrigeration Lab II.....	3
General Elective.....	3
GER Elective 5	3
	15

SEMESTER IV

ACHP 105 Refrigeration SYSTEM Design	2
AREA 210 Sustainable Building	3
HVAC 205 HVAC Service and Repair Coordination.....	3
DEISJ Elective.....	3
General Elective	3
	14

1 Mathematics level depends on previous preparation. Applied College Mathematics (MATH 101) is the minimum requirement. Math 106 Intermediately Graduation Requirements: Total Semester Credit Hours – G.P.A. 2.0 min.

Student Learning Outcomes can be found at
www.canton.edu/csoet/hvac-aos/.

Individual Studies—AAS

STUDENTS IN THIS MAJOR:

- Enroll in one of the Schools: School of Business and Liberal Arts; Canino School of Engineering Technology; or School of Science, Health, and Criminal Justice.
- Develop a program consistent with a specific career objective.
- Have the opportunity to explore an unknown area.
- Benefit from the knowledge and skills obtained through life experiences.
- Earn an Associates in Applied Science after 60 credits hours.
- May transfer into baccalaureate degree programs.

CAREER OPPORTUNITIES:

Employment options are unlimited, students while working closely with an academic advisor can design their own programs.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Burke’s Construction
- Fleet Bank
- Dine-A-Mate, Inc.
- Builders Square
- Corning, Inc.
- Claxton-Hepburn Medical Center
- Potsdam Stone and Concrete
- Morris Protective Services

ADMISSION REQUIREMENTS:

- Student should be prepared to take Composition and the Spoken Word (ENGL 101).
- Transfer students must meet re-registration requirements.

TRANSFER OPPORTUNITIES:

- SUNY Canton
- SUNY Potsdam, Plattsburgh, Oswego, Cortland, Geneseo, and Brockport
- State University Centers at Albany, Buffalo, and Binghamton
- Clarkson University
- Niagara University
- St. Lawrence University

PROGRAM REQUIREMENTS:

(CURRICULUM 0688)	
English/Humanities.....	6
Social Science	6
Natural Sciences and/or Mathematics.....	6
Applied Electives *.....	21
Liberal Arts Elective	3
General Electives	18
First Year Experience	1
	61*

**All students must take a writing intensive course.*

Student Learning Outcomes can be found at
www.canton.edu/business/individual.html.

Liberal Arts and Sciences: General Studies—AA, AS

STUDENTS IN THIS MAJOR:

- Develop a program consistent with a specific career objective or select a concentration from academic areas of humanities, social sciences or natural sciences.
- Prepare for careers in teaching, law, journalism, public administration, human services, finance, insurance, pharmacy, physical therapy, and other fields requiring an understanding of the human condition and the ability to communicate ideas.
- Graduate and continue study in such disciplines as English, education, art, drama, music, communication, economics, history, psychology, sociology, and anthropology.
- Complete all or the majority of the courses required in the first two years of a baccalaureate program in the natural and physical sciences.
- The Liberal Arts degree can be completed fully online, on campus, or a combination of both.
- Have the opportunity to cross-register at SUNY Potsdam, St. Lawrence University, and Clarkson University.
- Transfer to baccalaureate programs.

CAREER OPPORTUNITIES:

Employment options are unlimited, since in consultation with the academic advisor, students can design their own programs.

TRANSFER OPPORTUNITIES:

- 30 SUNY Canton Bachelor's Degree Programs: <https://www.canton.edu/academics/degrees.html>
- SUNY Higher Education Institutions: <https://explore.suny.edu/>
- St. Lawrence University

- State University Centers at Albany, Buffalo, and Binghamton
- Clarkson University

ADMISSION REQUIREMENTS:

- Prepared to take Composition & the Spoken Word (ENGL 101)
 - NYS English Regents score ≥ 75 ; or
 - Verbal SAT score ≥ 420 ; or
 - Reading and Writing ACT scores ≥ 17 ; or
 - Transfer student who has already passed a college-level English course.
- Prepared to take GER Math
 - NYS Geometry Regents or Math A plus one year; or
 - Already passed Intermediate Algebra or equivalent.

PROGRAM REQUIREMENTS:

(CURRICULUM 0250)

AA DEGREE CREDITS

ENGL 101	Composition & the Spoken Word	3
FYEP 101	First Year Experience	1
Literature OR Humanities GER 6		3
Humanities Elective		3
The Arts OR World Language (GER 8, 9 11)		3
US History OR World History (GER 9,10)		3
Diversity: Equity, Inclusion & Social Justice (GER 3)		3
Social Science (GER 7)		3
GER Elective 3		
Mathematics (GER 4) ¹		3
Natural Science (GER 5) ²		4
Liberal Arts Electives		15
General Electives		15
The AA Degree requires minimum, 45 semester hours In Liberal Arts		
		60-62⁴

AS DEGREE

ENGL 101	Composition & Spoken Word	3
FYEP 101	First Year Experience	1
Literature OR Humanities GER 6		3
The Arts or World Language (GER 8, 9 11)		3
US History OR World History (GER 9,10)		3
Diversity: Equity, Inclusion & Social Justice (GER 3)		3

Social Science (GER 7)	3
Mathematics (GER 4) 1	3
Lab Science (GER 5) 2	4
Liberal Arts Electives	6
General Electives	30
The A.S. Degree requires minimum, 30 semester hours in Liberal Arts	
60-62⁴	

¹ Minimum level Intermediate Algebra (MATH 106) or Survey of Math (MATH 111)

² Science course must be a laboratory science.

⁴ Required: One writing intensive course in a liberal arts or science discipline

Student Learning Outcomes can be found at www.canton.edu/business/libarts.html.

Advisor Note:

- Transfer students: May transfer a 3 or 4 credit *Lab Science or Science [GER 2]
- Option to waive **FYEP 101

Mechanical Engineering Technology—AAS

Graduates of Mechanical Engineering Technology (MET) work in a wide range of industries with a broad array of career opportunities. From manufacturing (CNC Machinist) and construction to equipment testing and power generation, employment opportunities exist in CAD Design, product/system testing, quality improvement, and technical services support. The MET program is appropriate for individuals who like hands-on experience, enjoy technology, and aspire to the challenge of experimentation and problem solving.

STUDENTS IN THIS MAJOR:

- Practice and demonstrate hands on manufacturing skills related to machining, design and drafting, fluid power, mechanical design and electricity.
- Develop core skills in Science, Technology, Engineering and Mathematics to commence their career immediately upon graduation or to continue with the pursuit of a baccalaureate degree.
- Apply computer skills to design, interpret and analyze data, solve problems and prepare reports/presentations for professional communications.
- Apply the scientific and technical knowledge to design, test, troubleshoot and improve machines, tooling, processes and information flow that serve the manufacturing industry.

CAREER OPPORTUNITIES:

Typical job titles in which our graduates are employed are:

- Mechanical Engineering Technician
- Engineering Assistant
- Computer-Aided Drafting
- Designer
- Quality Management Technician
- Lab Technician
- Instructional Assistant
- Field Service Technician
- CNC operator/programmer

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Corning, Inc.
- CIVES Steel Co.
- FilterTech
- Viking-Cives, USA
- Schneider Packaging
- TRC
- Gleason Works
- Bombardier, Inc.
- Novelis

PLACEMENT:

- All graduates during the past five years have either started their careers or continued their education. Forty percent in industry, and sixty percent elected to continue their education with the pursuit of a baccalaureate degree.

TRANSFER OPPORTUNITIES:

- SUNY Canton (Alternative and Renewable Energy Systems, Industrial Technology Management, Mechanical Engineering Technology)
- SUNY Utica/Rome
- Rochester Institute of Technology
- SUNY Alfred
- SUNY Buffalo

ACCREDITATION:

- Accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, 415 N. Charles Street Baltimore, MD 21201 – Telephone (410) 347-7700.

ADMISSION REQUIREMENTS:

- Students must be qualified to enter Pre-Calculus Algebra (MATH 123)

Students who do not meet the recommended high school math prerequisites may be admitted; students may be admitted into Mechanical Engineering Technology upon completion of this prerequisite.

PROGRAM REQUIREMENTS: (CURRICULUM 0493)

SEMESTER I	CREDITS
MATH 123 Pre-Calculus (GER 1).....	4
MECH 121 Manufacturing Processes I.....	3
ENGS 101 Introduction to Engineering.....	2
PHYS 121/131 College/University Physics I (GER 2)	3
PHY 125/135 Physics Lab 1 (GER 2)	1
MECH 101 Drawing for Engineers.....	1
	14

SEMESTER II

MATH 161 Calculus I	4
ENGL 101 Composition & The Spoken Word....	3
PHYS 122/132 College/University Physics II.....	3
PHYS 126/136 Physics Lab 2.....	1
MECH 102 Parametric Modeling	2
MECH 122 Introduction to 3D Printing.....	1
Elective ¹	2
	16

SEMESTER III

Elective ¹	3
ENGS 201 Statics	3
MECH 261 MET Electricity	4
MECH 241 / ENGS 314.. Fluid Mechanics / Fluid Mechanics I	3
MECH 242 Fluid Power Lab	1
GER (6, 7, 8, 9, 10, 11) ³	3
	17

SEMESTER IV

ENGS 203 Engineering Strength of Materials.....	3
MECH 220 Engineering Materials.....	3
MECH 221 MET Lab ²	1
Elective ¹	3
MECH 303 GD&T (Geometric Dimensioning and Tolerancing).....	2
Diversity Elective.....	3
	15

¹ Program electives selected from ACHP, AREA, ENGS, CITA, CONS, ELEC, MATH, MECH, SOET designators and AUTO 104. If going into the 4-yr MET, take MATH 162 (Calculus II) and MECH 301/ENGS 202.

² Writing intensive course.

³ GER elective – Must have GER (1/2, 3, 4, 5) and 20 total credits. Select one more from 6-11:

Student Learning Outcomes can be found at www.canton.edu/csoet/mech_eng.html.

STUDENTS IN THIS MAJOR:

- Make judgments in practice, substantiated with evidence, that integrate nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context.
- Minimize risk of harm to patients and providers through both system effectiveness and individual performance.
- Use information and technology to communicate, manage knowledge, mitigate error, and support decision-making.
- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context.
- Function effectively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.
- Advocate for clients and families in ways that promote their self-determination, integrity, and ongoing growth as human beings.
- Recognize the client or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for client's preferences, values, and needs.
- Examine the evidence that underlies clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for patients, families, and communities.
- Use data to monitor the outcomes of care processes and use improvement methods to design and test changes to continuously improve the quality and safety of health care systems
- Integrate best current evidence with clinical expertise and patient/family prefer-

ences and values for delivery of optimal health care.

- Participate in clinical practicums, including clinical assignments locally and at SUNY Upstate Medical

CAREER OUTLOOK:

- Nursing is the largest health care occupation.
- There is increasing diversity in nursing employment, and projections indicate large numbers of new jobs

CAREER OPPORTUNITIES:

- Hospitals and outpatient clinics
- Long-term care facilities
- Community health agencies
- Schools
- Correctional Facilities
- Military Service

TRANSFER OPPORTUNITIES:

- Graduates have a number of transfer options including: RN-MSN, RN-BSN, and BSN programs. Students may also elect to transfer into the SUNY Canton online RN-BS program.

ACCREDITATIONS:

- Registered by the NYS Education Department, Office of the Professions State Education Building-2nd Floor, Albany NY 12234, and phone: 518-474-3817.
- Accredited by the Accreditation Commission for Education in Nursing, 3390 Peachtree Road, Suite 1400, Atlanta, Georgia 30326, and phone: 404-975-5000.

ADMISSION REQUIREMENTS:

Admission requirements can be found online at: www.canton.edu/sci_health/nurs/description.html

PROGRAM REQUIREMENTS:

(CURRICULUM 0622)

SEMESTER I	CREDITS
NURS 101 Fundamentals of Nursing	6
NURS 103 Pharmacology I	1
NURS 105 Nursing Seminar	1
BIOL 217 Human Anatomy & Physiology I	4
ENGL 101 Composition & the Spoken Word	3
	<u>15</u>

SEMESTER II	
NURS 104 Pharmacology II	1
NURS 106 Maternal/Newborn Nursing	4.5
NURS 107 Mental Health Nursing	4.5
BIOL 218 Human Anatomy & Physiology II	4
PSYC 101 Introduction to Psychology	3
	<u>17</u>

SEMESTER III	
NURS 200 Pharmacology III	1
NURS 201 Medical-Surgical Nursing I	10
BIOL 209 Microbiology	4
SOCI 101 Introduction to Sociology	3
	<u>18</u>

SEMESTER IV	
NURS 202 Medical-Surgical Nursing IV	10
NURS 203 Profes. Issues & Trends in Nursing* ..	1
NURS 204 Pharmacology IV	1
	<u>12</u>

Graduation Requirements: Total Semester Credit Hours – 62

GPA – 2.0 minimum

Writing Intensive

*A grade of C+ or better is required for successful completion of all Nursing courses and a C or better in all co-requisite courses.

Physical Therapist Assistant—AAS

STUDENTS IN THIS MAJOR:

- Assist the Physical Therapist in implementing a plan of care, utilizing various physical therapy interventions to promote healing and restore function.
- Develop professional behaviors required to be an effective member of the health-care team.
- Are eligible to take the National Physical Therapy Examination for the Physical Therapist Assistant after graduation.

CAREER OPPORTUNITIES:

- PTA's work in hospitals, nursing homes, rehabilitative centers, certified home health care agencies, private practices, and schools.

CAREER OUTLOOK

- According to the 2025 Occupational Outlook Handbook, employment for PTA's is projected to grow 19% between 2022-2032.
- According to data reported by the American Physical Therapy Association in 2024, there was a 17.2% growth in job openings for PTAs in outpatient clinics from 2023-2024

TRANSFER OPPORTUNITIES:

- Students can continue their studies in the Health and Fitness Promotion B. Tech program. The B. Tech program can assist students in meeting admissions requirements for a health-related graduate or doctoral degree program or to enhance employment opportunities in the health and fitness field.

ACCREDITATION:

- The PTA program at SUNY Canton is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: <http://www.capteonline.org>.

ADMISSION REQUIREMENTS:

The Physical Therapist Assistant Program is a selective admissions program. Admission requirements and details of the admissions process can be found online at www.canton.edu/sci_health/pta/

PROGRAM REQUIREMENTS:

(CURRICULUM 0489)

SEMESTER I	CREDITS
PHTA 100 PTA Seminar I	2
PHTA 101 Fund PT Procedures	4
BIOL 217 Human Anatomy & Physiology I	4
ENGL 101 Composition and the Spoken Word	3
PSYC 101 Introductory Psychology	3
	<u>16</u>

SEMESTER II

PHTA 102 Functional Anatomy	4
PHTA 103 Musculoskeletal Pathologies	4
PHTA 107 PTA Seminar II	1
BIOL 218 Human Anatomy & Physiology II	4
PSYC 225 Human Development	3
PHTA 104 **Clinical I (summer)	4
	<u>20</u>

SEMESTER III

PHTA 203 PTA Seminar III* ³	2
PHTA 204 Cardiopulmonary & Integumentary Pathologies	4
PHTA 205 Neuromuscular Pathologies	4
PHTA 206 Advanced PT Procedures	2
MATH Math 111 or higher	3
	<u>15</u>

SEMESTER IV

PHTA 207 ** Clinical II	6
PHTA 209 ** Clinical III ³	6
PHTA 210 PTA Seminar IV ³	1
	<u>14</u>

* *Fulfills writing intensive requirement.*

** *Students must be prepared to work 40 hours per week and are responsible for their own transportation, meals, and housing as needed.*

³ – *DEISJ (GER 3) satisfied through completion of these 3 courses, in which DEISJ content is infused*

Student Learning Outcomes can be found at www.canton.edu/sci_health/pta/.

—CPR certification (Health Provider Status) is required by the end of the first semester.

—Students may be required to submit to a drug screen and/or a criminal background check as part of clinical education requirements.

—To progress in the PTA curriculum a minimal grade of C in BIOL 217 & BIOL 218 and C+ in all curriculum courses prefixed with PHTA must be achieved.

—Of all PHTA prefixed courses, only one course may be repeated one time.

—The NYS Education Department Office of the Professions requires persons applying for licensure to answer questions related to conviction of a crime or professional misconduct.

Residency Requirement: Students must be matriculated in the curriculum for at least 15 hours of graded coursework. At least 12 of these credits must be prefixed with PHTA. The Program Director will determine the 12 credit requirement following a review of the student's academic transcript

Veterinary Science Technology—AAS

STUDENTS IN THIS MAJOR:

- Work with companion animals, farm animals and common laboratory animals.
- Gain hands-on experience in small laboratory sections.
- Will be eligible to take the Veterinary Technician National Licensing Examination (VTNE) upon graduation.
- Will be eligible to take the certification examination of the American Association of Laboratory Animal Science after six months of laboratory employment.
- Perform two 120 hour Preceptorships

CAREER OPPORTUNITIES:

Veterinary technicians provide professional technical support to veterinarians, biomedical researchers, and other animal care specialists. Technicians may work in:

- Clinical Practice
- Animal Shelters
- Diagnostic Laboratories
- Educational Institutions
- Pharmaceutical and Research Industry
- Veterinary Supply and Equipment Sales
- Zoo/Wildlife Medicine
- State and Federal Agencies
- Farms & Stables

CAREER OUTLOOK:

- Veterinary Technician has been listed as one of Money Magazine's "Top 10 Fastest Growing Career Fields."
- At the present time, there is a serious shortage of veterinary technicians throughout the country.

TRANSFER OPPORTUNITIES:

- Articulation agreement with Cornell College of Agriculture and Life Sciences undergraduate program in Animal Science for any student graduating with a 3.0 average and possessing the required prerequisite courses.
- Articulation agreement with Mercy College.
- SUNY Canton (Veterinary Services Administration, BBA)

TIME TO COMPLETE THE PROGRAM:

Once enrolled in Fundamental Veterinary Nursing Skills I (VSCT 101), students must complete the Veterinary Science program within four years. For extraordinary situations, permission to complete the Veterinary Science program beyond four years may be granted by the Dean of the School of Science, Health and Criminal Justice in consultation with the Veterinary Science Program Director.

ACCREDITATION:

- Full Accreditation—AVMA, 1931 N Meacham Rd., Suite 100, Schaumburg, IL 60173-4360. 847-925-8070

ADMISSION REQUIREMENTS:

Admission is selective and based on academic credentials. To be considered for admission, please refer to the requirements posted on our webpage at: www.canton.edu/sci_health/vet/description.html

The pre-exposure rabies vaccine is required in the program. This is administered in a series of two vaccinations and must be completed during or prior to the semester the student is enrolled in VSCT 101

PROGRAM REQUIREMENTS:

(CURRICULUM 0521)

SEMESTER I	CREDITS
VSCT 101 Fundamental Vet. Nursing Skills I	2
VSCT 103 Intro. to Animal Agriculture	2
BIOL 150 College Biology I	4
CHEM 150 College Chemistry I	4
ENGL 101 Expository Writing OR	
ENGL 101 Composition & the Spoken Word	3
MATH Mathematics (GER 4)	3
	18

SEMESTER II

VSCT 104 Veterinary Office Practices	1
VSCT 112 Veterinary Clinical Pathology I	3
VSCT 114 Animal Anatomy & Physiology	3
VSCT 115 Fundamental Vet. Nursing Skills II ...	2
VSCT 212 Research Animal Techniques	1
VSCT 206 Anesthetic Principles	3
DEISJ Elective (GER 3)	3
	16

SEMESTER III

VSCT 202 Veterinary Clinical Pathology II	3
VSCT 203 Small Animal Medicine & Therapeutic Techniques	3
VSCT 204 Large Animal Medicine & Therapeutic Techniques	3
VSCT 205 Radiographic Techniques	2
VSCT 214 Veterinary Pharmacology	2
VSCT 201 Veterinary Technology Preceptorship I	1
	14

SEMESTER IV

VSCT 210 Veterinary Microbiology	1
VSCT 211 Animal Hospital Practices and Procedures *	3
VSCT 213 Practical Nutrition	2
VSCT 214 Veterinary Pharmacology	2
PSYC 101 Introductory Psychology	3
VSCT 209 Veterinary Technology Preceptorship II	1
VSCT 207 Health & Disease of Farm Animals ...	2
BIOL 209 Microbiology	4
	16

* *Fulfills writing intensive requirement.*

– *Of the courses with the VSCT prefix, any course may only be repeated one time.*

– *Students are required to earn a C or better in all specified curriculum courses prefixed with VSCT in order to progress in the program.*

– *The NYS Education Department Office of the Professions requires persons applying for licensure to answer questions related to a conviction of a crime or professional misconduct.*

Student Learning Outcomes can be found at www.canton.edu/sci_health/vet_tech/.

Residency Requirement: In order to graduate from the Veterinary Science Technology program, students must successfully complete SUNY Canton's VSCT 211 and at least 9 other hours of graded course work with a VSCT prefix in order to fulfill the residency requirement.

Electrical Construction & Maintenance—Certificate

The Electrical Construction & Maintenance (EC & M) program prepares students to work in building trades with the installation and testing of electrical power distribution and an emphasis placed on residential construction applications. Students are also introduced to commercial applications and building codes. At the successful completion of this one-year program, students will earn the EC&M certificate.

STUDENTS IN THIS CERTIFICATE PROGRAM:

- Install wiring systems and equipment in buildings.
- Connect electrical devices in accordance with the NEC (National Electrical Code).
- Perform routine maintenance on motors and transformers.
- Install motor control circuits.

CAREER OPPORTUNITIES:

- Electrical Apprentice
- Electrician
- Plant Maintenance Technician
- Electrical Supply Counter Person and Sales Support Person
- Electrical/Electronic Assembly
- Security Systems Sales and Service Representative
- Power Corporation Service Representative
- Entrepreneurship

CAREER OUTLOOK:

- The construction industry continues to exhibit a demand for skilled electrical technicians.

RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- International Brotherhood of Electrical Workers
- Niagara Mohawk Power Corporation
- Novelis
- Smith Building Supply
- NYSEG
- S & L Electric

TRANSFER OPPORTUNITIES:

- Approximately 50% of EC&M graduates choose to pursue further education full time at:
- SUNY Canton—AAS degree programs and other certificate programs
- Rochester Institute of Technology
- SUNY Utica/Rome, Oswego

Students completing two one-year Certificate programs in the Canino School of Engineering Technology can graduate with two Certificates and an Associate in Applied Science degree by completing the requirements of the Individual Studies (Eng) AAS program while pursuing the second technical certificate.

ADMISSION REQUIREMENTS:

- Students are expected to have demonstrated academic success in high school and/or prior college experience.

PROGRAM REQUIREMENTS:

(CURRICULUM 0955)

SEMESTER I	CREDITS
CONS 151 Building Trades Blueprint Reading/Drafting.....	2
ECMR 101 Electricity for Trades.....	3
ECMR 103 Electricity for Trades Lab.....	4
MATH 101 *Applied College Mathematics or higher.....	4
ECMR 175 Photovoltaic Solar Installers.....	3
	<u>16</u>

SEMESTER II

ECMR 102 Electricity for Trades II.....	3
ECMR 104 Electricity for Trades II Lab.....	4
ENGL ____ English (Writing).....	3
ECMR 173 Intro to National Electrical Code.....	3
____ ____ Math/Science/Technical Elective**.....	3
	<u>16</u>

**Mathematics levels depend on previous preparation. (MATH 101) is the minimum requirement, (MATH 106 Intermediate Algebra may be substituted). Those graduates who show sufficient interest and aptitude may qualify for entry into one of the associate degree programs.*

***Approved by advisor; prerequisites must be satisfied, selected from any of the following designators: ACHP, AREA, BIOL, CHEM, CITA, CONS, ELEC, ENGS, ESCI, MATH, MECH, MFGT, MINS, PHSC, PHYS, SOET, or TMMA.*

Graduation Requirements: Total Semester Credit Hours - 32. Graduates must complete all courses listed above and earn a cumulative index of at least 1.75.

Student Learning Outcomes can be found at www.canton.edu/csoet/ecm.html.

Those graduates who show sufficient interest and aptitude may qualify for entry into one of the associate degree programs.

Gainful Employment information is available at: www.canton.edu/academics/ge/ecm.html

Practical Nursing—Certificate

STUDENTS IN THIS CERTIFICATE PROGRAM:

- Demonstrate appropriate care to clients with stable and predictable conditions.
- Understand client disorders and nursing care utilizing current evidence based practice.
- Demonstrate developmentally appropriate, respectful and effective therapeutic communication skills.
- Identify clinical scenarios and situations that fall outside of the PN scope of practice.
- Demonstrate, proper technique with nursing skills, use of client care equipment and technology in a cost effective manner.
- Comprehend client environmental factors, family support, and resources that may affect a client's health status.
- Demonstrate accountability for legal, ethical, and regulatory parameters within the scope of practice of the practical nurse.
- Operate effectively within multidisciplinary teams, fostering open communication, mutual respect, and shared decision-making to provide comprehensive client centered care.
- Collect data and health histories for individuals using standardized tools in an organized pattern, thereby contributing to nursing care plan.
- Demonstrate caring behaviors toward clients and his/her significant others, thereby assisting coping with stressful events and changes in health status.
- Implement standardized teaching tools to promote and maintain health and to reduce risks for clients experiencing common altered health states in the hospital and extended care facilities.
- Observe, reflect, and participate in self-performance and peer-to-peer teaching.

CAREER OPPORTUNITIES:

- Acute care
- Long-term care
- Clinic settings
- Physician Offices
- Hospice
- Community Health
- Mental Health

TRANSFER OPPORTUNITIES:

- Graduates of the Practical Nursing program are able to transfer into an associates degree or baccalaureate degree nursing programs.

ACCREDITATIONS:

- Registered by the NYS Education Department, Office of the Professions State Education Building-2nd Floor, Albany NY 12234, and phone: 518-474-3817.
- Accredited by the Accreditation Commission for Education in Nursing, 3390 Peachtree Road, Suite 1400, Atlanta, Georgia 30326, and phone: 404-975-5000.

ADMISSION REQUIREMENTS:

Admission requirements can be found online at: www.canton.edu/sci_health/practical-reqs.html

PROGRAM REQUIREMENTS:

(CURRICULUM 0938)

SEMESTER I	CREDITS
LPNC 100 Drug Dosage Calc. & Pharm.....	3
LPNC 101 PN Fundamentals.....	8
BIOL 217 Human Anatomy & Physiology I.....	4
ENGL 101 Composition & Spoken Word.....	3
	18

SEMESTER II

LPNC 102 PN Specialty Populations.....	3
LPNC 103 PN Medical-Surgical.....	8
BIOL 218 Human Anatomy & Physiology II.....	4
PSYC 101 Introduction to Psychology.....	3
	18

—Students must complete all LPNC courses with a minimal grade of C+ in order to graduate and corequisite courses with a grade of C or better.

—GPA of 2.0 or better is required to continue in the program.

—Of the two clinical practical nursing courses (LPNC 101, LPNC 103), only one may be repeated one time.

—Students will complete clinical experiences in hospitals, long-term care facilities, and community agencies throughout Northern New York. Clinical hours may include day, evening, and weekend hours. The college does not provide transportation to clinical sites.

Residency Requirements: Students must complete SUNY Canton's LPNC 102 and LPNC 103 in order to complete the program residency requirements.

—Enrolled students are required to purchase a standardized testing program. A tablet or laptop computer is required.

—CPR certification (Health Provider Status) is required prior to admission and throughout the program.

Gainful Employment information is available at: www.canton.edu/academics/ge/pn.html

Other Programs

ENVIRONMENTAL SCIENCE AND FORESTRY—2+2 Cooperative Program with SUNY-ESF, Syracuse

SUNY Canton participates in a cooperative program with the SUNY College of Environmental Science and Forestry (ESF). By providing most of the required courses needed at ESF, this effort insures an easy transition into a student's junior (3rd) year at the College. SUNY Canton graduates attending ESF compete extremely well with students from other colleges.

Students enrolled in this program receive an AA degree in Liberal Arts and Sciences:

General Studies. A student attending SUNY Canton is able to obtain all the necessary required courses for the various pre-environmental programs during two years¹.

The ESF programs are: Aquatic and Fisheries Science, Conservation Biology, Environmental Biology, Environmental Science, Environmental Studies, Forest Ecosystems Science, Forest Resource Management, Landscape Architecture, Natural Resource Management, and Wildlife Science.

Students interested in this program need to apply for the Liberal Arts and Sciences: General Studies (Curriculum 0250) program. Call the Office of Admissions 315-386-7123/800-388-7123 for further details.

¹Some curricula may require cross-registration to complete requirements.

FOREST TECHNOLOGY—1+1 Cooperative Program with SUNY ESF, Wanakena

SUNY Canton participates in a cooperative one-plus-one program with the Ranger School at the SUNY College of Environmental Science and Forestry (SUNY-ESF). Students who select this career goal complete one year at SUNY Canton and one year at the Ranger School in Wanakena, where they will choose between three academic concentrations: Forest Technology, Land Surveying Technology, or Environmental and Natural Resources Conservation. The degree of Associate in Applied Science is awarded upon graduation from SUNY-ESF. Graduates are prepared to seek positions as forest technicians, land surveyors, or field/laboratory technicians, or to transfer to a four-year program at SUNY-ESF.

Students pursuing this program are admitted to SUNY Canton for the first year of enrollment and application must be made to SUNY-ESF for the second year. To learn more about the programs offered at Wanakena, visit www.esf.edu/rangerschool/ programs.

ADMISSIONS REQUIREMENTS:

- Prepared to take College Biology I —NYS Regents Biology score ≥ 75 ; or —Already passed Intro. to Biology
- Prepared to take at least Intermediate Algebra
- Prepared to take Expository Writing

The following is the recommended first-year course of study for transfer to SUNY College of Environmental Science and Forestry at Wanakena.

(CURRICULUM 0620)

SEMESTER I	CREDITS
BIOL 150 College Biology I.....	4
ECON 101 Principles of Macroeconomics*.....	3
ENGL 101 Expository Writing.....	3
MATH 106 Intermediate Algebra OR	
MATH 121 College Algebra OR	
MATH 123 Pre-Calculus Algebra**.....	3-4
	13-14

SEMESTER II

BIOL 155 College Biology II OR	
CHEM 155 College Chemistry II OR	
PHYS 121/125 College Physics I***.....	4
ENGL 202 Creative Non-Fiction OR	
Writing Intensive English.....	3
MATH 121 College Algebra OR	
MATH 123 Pre-Calculus Algebra OR	
General Elective.....	3-4
General Elective	
(GER 3,4,5,6,7)****.....	3
	16-17

* Students interested in Environmental & Natural Resources Conservation take POLS 101 or POLS 105 In place of ECON 101.

** Students interested In the Land Surveying option must take MATH 123 in Semester I or II.

*** Students interested in the Land Surveying Option must take PHYS 121/125 in Semester I or II.

**** HIST 103 or HIST 105 recommended as a GER elective.

Students planning to continue in the B.S. degree program in Forest Resources Management (SUNY-ESF) after earning an A.A.S degree in Forest Technology take BIOL 150, CHEM 150, ENGL 101, MATH 121, and PHYS 121 & PHYS 125 and MATH 121 in semester I; BIOL 155, ECON 101, ENGL 221, HIST 105, and MATH 161 in semester II.

SUNY CANTON CORRECTIONS ACADEMY

The SUNY Canton Corrections Academy is offered every summer in conjunction with the St. Lawrence County Sheriff's Office and follows the New York State Division of Criminal Justice Services (DCJS) approved guidelines. The SUNY Canton Corrections Academy is open to individuals who have been hired by the St. Lawrence County Sheriff's Office and other surrounding county agencies, as well as all SUNY students who meet the eligibility guidelines. Completion of the academy as a student will provide you with 2 years of pre-certification eligibility for employment with county corrections within the state of New York. In order to become fully employed as a county corrections officer one must successfully complete and pass the NYS civil service exam.

ELIGIBILITY GUIDELINES

- Enrollment at a SUNY school (first priority provided to SUNY Canton students)
- GPA of 3.0 or higher
- At least 18 years of age

ACADEMY LOCATION

The academy is held on the SUNY Canton campus and all coursework will be completed in Wicks Halls in the classroom associated with University Police. Sign up early because space is limited.

DRESS CODE

- Black BDU pants
- Black dress shoes or boots
- Minimum (2) Corrections Academy t-shirts must be purchased prior to the first day (orders will begin in April and each shirt will cost \$11.00)

In order to attend the summer SUNY Canton Corrections Academy as a student, enrollment in JUST 431 - Culminating Experience in Corrections (4 credits) must be completed prior to the first day of the

academy. During the summer academy two additional upper level corrections related courses (6 credits) will also be offered online for a total of 10 credits (academy 4 credits + 2 upper division courses) that can be achieved and transferred back to your home institution. Enrollment in the two additional online corrections courses is optional and not required to participate in the academy.

SUNY CANTON LIVING ACCOMMODATIONS

Housing is available in Kennedy Hall at a cost of \$900 per person for the duration of the summer academy. This rate includes a single bedroom in an apartment-style suite with a shared full kitchen, living room and bathroom. The suites are furnished but do not include linens or kitchen items (dishes, pots, pans, etc.). The living room in each suite has air conditioning but the bedrooms are not air conditioned (a fan is recommended). If you would like to arrange housing please contact the Residence Life Office at 315-386-7513 or via email at reslife@canton.edu at least two weeks prior to the program.

SUNY CANTON FITNESS CENTER

The fitness center will be offering a pro-rated 5-week membership during the academy at a reduced rate of \$25.00. Membership can be obtained during the first day of coursework by visiting the fitness center located in the SUNY Canton Convocation, Athletic, and Recreation Center.

FINANCIAL AID FOR SUMMER STUDY

There is financial aid available for the summer sessions. In order to receive aid for summer, the following must be taken into consideration:

You must be admitted into a degree program. New students will not be eligible for summer financial aid (includes students

admitted for Fall 2018).

All summer courses **MUST** be applicable to your current degree program in order to receive aid. Your academic advisor will assign you a summer registration code for scheduling access on UCanWeb.

Financial aid you receive in the summer may reduce your eligibility for aid during the academic year or in a subsequent year.

Taking courses at another college? To receive aid to help pay for them you must complete and submit a Consortium Agreement. To be aid eligible the course must transfer back into your degree program. Be prepared to pay for your course upfront and be reimbursed by aid later, not all schools participate in this process especially during summer. Be sure to check with the other school for their policy when signing up for the courses.

For academy related questions please contact Dr. Liz Brown, Chair of the Criminal Justice Department at (315)386-7504 or ericksone@canton.edu OR Cpl. Rodney Votra, Programs Director / Training Coordinator, St. Lawrence County Sheriff's Office at (315)379-2414 or rvotra@stlawco.org

Send completed applications to:

Dr. Elizabeth Brown
SUNY Canton
34 Cornell Drive, Payson 117B
Canton, NY 13617

UB SCHOOL OF LAW DEGREE (3+3) - B.S. + J.D.

With our new 3+3 program, you can save one full year of tuition by earning your bachelor's degree at SUNY Canton and your law degree at University at Buffalo School of Law, in just six years (instead of seven). It's one of the most affordable paths to a law degree in the country!

ABOUT THIS MAJOR:

The program is open to a SUNY Canton student who has maintained a 3.5 GPA and completed three years of under-graduate work in Legal Studies or Applied Psychology. To become eligible, students must have an LSAT score at or above the median LSAT for the School of Law's previous year's enrolled class (currently 153), complete the University at Buffalo School of Law application, and complete all required coursework toward the B.S. degree.

CAREER OPPORTUNITIES:

Holders of Juris Doctor degrees go on to careers including, but not limited to:

- Professional Litigators
- Corporate Counsel
- Wills, Estates, and Trusts Attorneys
- Judges
- Public Defenders
- Criminal Prosecutor
- Entrepreneurs
- Politicians

UPSTATE MEDICAL UNIVERSITY EARLY ADMISSION PROGRAM— *Joint Admission with SUNY Upstate Medical University at Syracuse*

Upstate Medical University Early Admissions Program is an early admission program for high school seniors who excel in math and science and are committed to careers in the health professions. Students accepted into the program are guaranteed admission into an upper division bachelor/master's degree program at the SUNY Upstate Medical University at Syracuse after attending their first two years at SUNY Canton and completing all admission requirements.

THE UPSTATE MEDICAL UNIVERSITY EARLY ADMISSIONS PROGRAMS ARE:

- Cardiovascular Perfusion, *BS*
- Medical Biotechnology, *BS*
- Medical Technology, *BS*
- Medical Imaging Sciences, *BS or BPS*
- Physical Therapy, *DPT*
- Respiratory Care, *BS*
- Radiation Therapy, *BS or BPS*

Interested students need to apply for Liberal Arts and Sciences: General Studies (Curriculum 0250) program. Call the Office of Admissions 315-386-7123 or 800-388-7123 for further details.

NOTES:

- All science courses must include laboratories.
- Upstate Medical University Early Admissions Program students are required to complete the associate degree and all requirements outlined in the program acceptance letter.
- Accepted students must demonstrate leadership qualities by getting involved in extracurricular activities at SUNY Canton.

Academic Minors

A minor is a course sequence within an area of study providing a degree of specialization within that area, a specialty within a discipline, or a specialty integrating several disciplines. Minors will contain a balance of introductory and advanced coursework. Minors are designed to be completed within the same time frame allowed for the completion of the baccalaureate degree. After matriculating in a program, students wishing to obtain a minor shall contact the coordinator of the minor to verify eligibility and initiate the process in UCanWeb. A minor will consist of a minimum of 18 credit hours, at least 9 of which will be upper division courses; a minimum of 12 credit hours of a minor must be completed in courses offered at SUNY Canton. At least 9 credit hours must not be required courses in the student's major program and the same course is not allowed to count for more than one minor. **IMPORTANT!** Before making that decision however, it is **strongly recommended** that students consult with a Financial Aid and/or Student Accounts Counselor.

ACADEMIC MINOR IN A BACCALAUREATE DEGREE

A minor must be declared while the student has at least 45 credit hours left to enroll in before qualifying for graduation.

ACADEMIC MINOR IN AN ASSOCIATE DEGREE

A minor must be declared while the student has at least 15 credit hours left to enroll in before qualifying for graduation.

ACCOUNTING

The Accounting Minor adds to the skillset and marketability of students preparing to enter the worlds of business and management. Accounting Minors advance their foundational accounting acumen by completing three required accounting courses (ACCT 300, ACCT 302, & ACCT 306) and three accounting electives that reflect their respective areas of interest. The Minor is available to any matriculated SUNY Canton student. Many students choose to pair enrollment in the Accounting Minor with enrollment in the Management, Finance, Legal Studies, or Health Care Management Program.

MINOR REQUIREMENTS CREDITS

ACCT 300	Intermediate Accounting I.....	3
ACCT 302	Intermediate Accounting II	3
ACCT 306	Cost Accounting.....	3

SELECT THREE COURSES

ACCT 242	Accounting for Government and Nonprofit Organizations	3
ACCT 310	Accounting Information Systems.....	3
ACCT 335	Individual Taxation.....	3
ACCT 430	Auditing	3
ACCT 440	Advanced Financial Accounting.....	3
BSAD 305	Public Budgeting and Fiscal Mgmt. ...	3
BSAD 365	Financial Statement Analysis.....	3

AGING IN SOCIETY

People are living longer, and the number of older persons is increasing. These trends are evident in American society, as well as in many developed countries around the world. In the U.S., life expectancy has increased, from approximately 45 years of age in 1900 to more than 75 years now. At the beginning of the 21st century, one in eight people in the U.S. was over 65. And

the age group growing fastest in our society and in many other countries is the "very old," people aged 85 and over.

This growth in our elderly population will continue into the future. By the middle of the 21st century, one in five Americans will be over 65, and there will be 15 to 18 million persons over the age of 85. These growth trends will result in a demand for both citizens and professionals with knowledge and expertise in the subject of aging. The area of Social Gerontology will offer expanded career opportunities for the disciplines and professions who will serve our older population (The Association for Gerontology in Higher Education, 2014).

MINOR REQUIREMENTS CREDITS

HLTH 104	Introduction to Gerontology	3
SOCI 101	Introduction to Sociology	3

SELECT FOUR COURSES

Only one additional 100 level course can be chosen; three must be upper level- 300 or above

FSAD 307 Human Responses to Death	3
HEFI 202 Health and Wellness Across the Lifespan	3
HLTH 103 Health Current Perspectives and Practical Applications	3
HLTH 212 Happiness, Health and Wellbeing.....	3
GRST 201 Introduction to Gender Studies.....	3
HUSV 201 Introduction to Human Services.....	3
PSYC 225 Human Development	3
SOCI 105 American Social Problems	3
SOCI 210 Sociology of the Family	3
SOCI 313 Women and Aging	3
SOCI 320 Sociology of Health, Illness and Health Care	3

SOCI 330	Sociology of Gendered Lives	3
SSCI 315	Death, Dying and Bereavement.....	3

APPLIED PHYSICS

The Applied Physics Minor is an excellent way for students to broaden their knowledge of physics and the world around them. Students build a secondary area of expertise in support of their major discipline. This minor is applicable to all students; it is of particular interest to students majoring in science and engineering technology programs. The minor provides courses that emphasize applications of physics with hands on projects.

MINOR REQUIREMENTS CREDITS

PHYS 121	College Physics I OR	
PHYS 131	University Physics I	4
PHYS 122	College Physics II OR	
PHYS 132	University Physics II	4
PHYS 202	Modern Physics	3
PHYS 301	Introduction to Photonics	3

SELECT TWO COURSES

PHYS 330	Intro to Classical Mechanics	3
PHYS 340	Electromagnetism.....	3
PHYS 410	Solid State Science.....	3
PHYS 420	Intro to Quantum Mechanics.....	3
AREA 320	Experimentation and Measurement I3	
MECH 342	Thermodynamics	3

APPLIED PSYCHOLOGY

The Minor in Applied Psychology largely focuses on Psychology (PSYC) designated courses as opposed to Human Services (HUSV) or Applied Behavior

Academic Minors

Analysis (ABAP). As such, a Minor in Applied Psychology is attractive to a wide range of students from various SUNY Canton programs.

MINOR REQUIREMENTS CREDITS

PSYC 101 Introduction to Psychology.....3

SELECT FIVE ADDITIONAL COURSES:

PSYC 225 Human Development3

PSYC 275 Abnormal Psychology3

ABAP 245 Introduction to Applied Behavior
Analysis3

HUSV 201 Introduction to Human Services.....3

PSYC 300 Cultural Psychology3

PSYC 308 Personality & Individual
Differences3

PSYC 315 Crisis Intervention3

PSYC 340 Social Psychology.....3

PSYC 406 Workplace Psychology3

PSYC 420 Counseling Skills & Process.....3

HEFI/PSYC 320 Psychology of Health and
Fitness/Health Psychology3

HUSV 305 Professional and Ethical
Responsibilities.....3

HUSV 315 Mental Health Practice3

JUST 331 Profiling and Behavioral
Criminology3

SPMT 330 Sport Psychology3

SSCI 370 Research Methods in Social Sciences.3

Other courses may be counted with the approval of the Minor Coordinator.

CHEMISTRY

A minor in chemistry offers students a chance to enhance their knowledge of the key principles of chemistry, such as inorganic, organic, and biological chemistry. This minor offers a strong complement to disciplines such as Veterinary Technology BS and Health and Fitness Promotion B.Tech, and is suited to students who are interested in pursuing graduate programs in science, engineering, medicine, or pharmacology.

MINOR REQUIREMENTS CREDITS

CHEM 150 College Chemistry I.....4

CHEM 155 College Chemistry II4

CHEM 301 Organic Chemistry I.....4

CHEM 302 Organic Chemistry II4

CHEM 430 Biochemistry3

CORRECTIONS

The corrections minor provides an overview of interworking's of the corrections system, including challenges and opportunities present within both institutional corrections and community-based correctional environments. This minor is suited for students interested in preparing for career opportunities with the criminal justice system. Courses within this minor focus on understanding the care, custody and control aspects of working with offenders involved in the criminal justice system.

MINOR REQUIREMENTS CREDITS

JUST 105 Correctional Philosophy3

JUST 211 Intro to Probation & Parole3

SELECT ONE COURSE:

JUST 341 Corrections Management and
Administration3

JUST 307 Penology.....3

JUST 311 Alternatives to Incarceration3

JUST 313 Juvenile Justice.....3

JUST 322 Gender and the CJ System.....3

JUST 340 Legal Issues of the Penal Syst.3

JUST 341 Corrections Manag & Admin.....3

JUST 349 Vulnerable Populations in CJ.....3

JUST 431 Culminating Exp in Corrections.....3

CRIMINOLOGY

This minor will provide students with an opportunity to further examine the relationship between victims, offenders and community members-at-large. An interdisciplinary approach is utilized to allow students the ability to examine this broad topic from the perspective of literature, psychology, and history while furthering theoretical studies in the field of criminal justice.

MINOR REQUIREMENTS CREDITS

JUST 310 Causes of Crime3

SELECT FIVE COURSES

JUST 202 Intro to Forensic Criminology

JUST 307 Penology.....3

JUST 316 Sex Offenders3

JUST 324 Serial Murderers and Their Victims...3

JUST 331 Profiling and Behavioral
Criminology3

JUST 347 Research Methods in Criminology
and CJ3

JUST 349 Vulnerable Populations in CJ.....3

JUST 350 Victimization.....3

ENGL 305 Perpetrators and Their Victims3

PSYC 275 Abnormal Psychology3

CRIMINAL JUSTICE ADMINISTRATION

The Criminal Justice Administration minor provides an opportunity for students to acquire a general knowledge of the administrative duties within the Criminal Justice System. This minor is a blend of foundational courses in the areas of business, math and criminal justice; along with supplementing with upper level program electives which will enhance the student's understanding and ability better prepare them for supervisory positions in the field of criminal justice.

MINOR REQUIREMENTS CREDITS

MATH 141 Statistics3

JUST 314 Ethics in CJ3

SELECT THREE COURSES

Students must choose three for a total of nine credit hours.

JUST 321 Managing Law Enforcement
Training.....3

JUST 333 Managing Patrol Functions.....3

JUST 335 Criminal Justice Agency Mgmt.....3

JUST 344 Civil Liability for the CJ
Administrator3

JUST 315 Constitutional Law.....3

JUST 341 Corrections Manag & Admin.....3

JUST 353 Criminal Justice Technology3

JUST 449 Current Issues in LE3

CYBERSECURITY

The Cybersecurity minor program will equip students with the necessary skills to pursue a career with additional Cybersecurity knowledge/skills needed in various industries. For example, healthcare records represent an extremely attractive target for cyber criminals, containing as they do various bits of sensitive information like Social Security numbers all in one place. The challenge for professionals working in the healthcare industry is that they just improve data protection without impeding healthcare professionals' speedy access to potentially life-saving patient information.

Academic Minors

MINOR REQUIREMENTS CREDITS

CYBR 165	Survey of Cybersecurity	3
CYBR 250	Information Security	3
CYBR/CITA 352	Ethical Hacking and Penetration Testing.....	3
CYBR 450	Cybersecurity Body of Knowledge	3

SELECT ONE COURSE

Students must choose one for a total of three credit hours.

MATH 351	Discrete Mathematics	3
CYBR 360	Cryptology in Theory and Practice ...	3
CYBR 365	Digital Forensic Analysis.....	3
CYBR 455	Access Control, Authentication, and PKI.....	3

SELECT ONE COURSE

Students must choose one for a total of three credit hours.

CYBR 354	Incident Response and Disaster Recovery.....	3
CYBR 356	Cryptology in Theory and Practice ...	3
CITA 440	Network Management AND	3
CITA 441	Network Management Lab	1

Data Science

The Data Science minor program will provide foundational and applied knowledge about data science and its uses. First, you'll learn the concept of data mining and the methods of knowing, preprocessing, processing and warehousing data. Then, by examining ethical considerations, you'll assess collection, storage, use and analysis of data. This minor is intended for game design, IT, cybersecurity, healthcare, CJ, or engineering majors who want to incorporate data science into their college experience.

* 9 credits of minor coursework must be at the upper-division level

MINOR REQUIREMENTS

COURSE NAME CREDITS

DATA 155	Survey of Data Science	3
DATA 230	Applied Data Science - R Prog.....	3
DATA 315	Data Mining & Machine Learning...	3
DATA 321	Big Data Fundamentals	3
DATA 415	Ethics in Data Science	3

SELECT ONE COURSE

Students must choose one for a total of three credit hours.

DATA 320	Data Security and Privacy.....	3
DATA 421	Deep Learning.....	3

Early Childhood Studies

The Minor in Early Childhood Studies offers a broad course of study in early childhood history, theory, child development, teaching, programming, and the importance of high-quality early care and education experiences, with a focus on children from infancy to age five. Students can select specific courses based on their area of interest.

MINOR REQUIRED COURSES CREDITS

ECHD 101	Introduction to Early Childhood.....	3
PSYC 101	Introductory Psychology.....	3

SELECT ONE LOWER-LEVEL COURSE

ECHD 121	Wellness in Young Children.....	3
ECHD 131	Infants and Toddlers	3
ECHD 250	Children with Special Needs.....	3
ECHD 285	Issues and Policies in Early Care and Education	3
EDUC 210	Principles of Education.....	3
PSYC 220	Child Development OR	
PSYC 225	Human Development.....	3

SELECT THREE UPPER-LEVEL COURSES

ECHD 300-400	Upper-Level Designated Program Course(s) -- Refer to Minor Course Listing	
BSAD 340	Management Communications.....	3
HIST 375	History of Childhood and Youth in the United States	

Economics

The Economics minor is applicable to all students who would like to broaden their knowledge of economics. It is a common minor for students majoring in business, management and finance. It provides students with analytical and problem-solving skills in applied economics fields such as economic development, economics of crime, environmental economics, financial economics, global economy, health economics, labor economics, managerial economics, public economics, and other areas. Six courses (18 credits) must include ECON 101, ECON 103, ECON 314, and ECON 315.

MINOR REQUIREMENTS CREDITS

ECON 101	Principles of Macroeconomics	3
ECON 103	Principles of Microeconomics.....	3

ECON 314	Managerial Economics.....	3
ECON 315	Global Economy.....	3

SELECT TWO COURSES

Any course with an ECON (and FSMA/ECON 330) designation may be used as an optional course in the minor. For students not in Finance, Principles of Banking and/or Global Finance, may be used as optional course(s) in the minor. At least one optional course must be at the upper level.

Entrepreneurship

Entrepreneurship encourages students to develop skills to create their own futures. The minor focuses on recognizing and seizing opportunities, fostering innovation, critical thinking, problem solving, leadership, teamwork and creativity. It is designed to prepare students to start their own business, create new technologies and products, or become managers of businesses. *Minor available starting Spring 2026. (18 credits).

MINOR REQUIREMENTS CREDITS

REQUIRED COURSE:

BSAD 345	Tech Innovations and Entrepreneurship	3
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SELECT ONE COURSE

Students must choose one from this group for a total of three credits:

BSAD 215	Small Business Management.....	3
BSAD 301	Principles of Management	3
FSAD 214	Funeral Home Management I	3
ECHD 340:	Policies and Regulations in Early Childhood Settings.....	3
HSMB 307	Health Care Facility Administration...	3

SELECT ONE COURSE

Students must choose one from this group for a total of three credits:

BSAD 200	Business Communications.....	3
BSAD 340	Management Communications	3
ENGL 301	Professional Writing and Communication	3
ENGL/TCOM 370	Artificial Intelligence and Communication	3
ENGL 380	Intercultural Communication	3

SELECT ONE COURSE

Students must choose one from this group for a total of three credits:

BSAD 309	Supply Chain Management.....	3
BSAD 375	Leadership and Change	3

Academic Minors

SELECT TWO COURSES:

Students must choose two from this group for a total of six credits:

BSAD 309 Supply Chain Management	3
BSAD 310 Human Resources	3
BSAD 322 Advertising and Promotion	3
BSAD 372 E-Commerce	3
BSAD 373 International Business Management	3
BSAD 375 Leadership and Change	3
BSAD 400 Operations/Product Management	3
FSAD 214 Funeral Home Management I	3
FSAD 322 Funeral Home Management II	3
ECHD 403 Family Child Care Development and Management	3
ECHD 340: Policies and Regulations in Early Childhood Settings.....	3
SPMT 312 Sports Entrepreneurship.....	3
SPMT 306 Sports Operations and Facilities Management	3
HEFI 404 Organization and Administration in Health & Fitness Professions	3
GAME 361 Professional Practices in Game Development.....	3
GMMD 302 Professional Photography.....	3
HSMB 307 Health Care Facility Administration ..	3
HSMB 309 Nursing Home Administration	3
HSMB 312 Medical Practice Management	3
VSAD 301 Veterinary Practice Management	3
VSAD 302 Animal Care Institution Management	3

ENVIRONMENTAL TECHNOLOGY

As global awareness of environmental issues increases, the environmental sector has emerged as a leading discipline in the science and engineering fields. As the environmental market continues to grow, so does the demand for trained environmental engineers, environmental engineering technicians, and environmental scientists. The Environmental Technology minor is designed for students in complimentary disciplines to diversify their background, providing them with knowledge and skills in areas related to air, water, and soil. A minor in Environmental Technology provides students with a more in-depth understanding of environmental related standards and regulations, resource management, water and soil resources, characterization and treatment of water and soil, and field/lab

techniques. The Environmental Technology minor provides a way for students to formally demonstrate competency in these areas and will make them competitive and highly sought after in today's market.

MINOR REQUIREMENTS:

A minimum of 19 credit hours is needed to complete the minor in Environmental Technology as follows:

CORE REQUIREMENTS CREDITS

CONS 285 Engineering Geology OR	
ESCI 107 Earth Science OR.....	4
GEOL 103* Physical Geology	3

ELECTIVE COURSES

CONS 101 Elementary Surveying.....	4
CONS 314 Soil Mechanics.....	3
CONS 350 Intro to GIS OR	3
GEOL 340* Geographic Information Systems.....	4
CONS 385 Hydrology and Hydrogeology.....	4
CONS 386 Water Quality	4
CONS 387 Water and Wastewater Treatment.....	3
CONS 388 Environmental Law	2
CONS 485 Solid Waste Management	3
CONS 486 Soil and Groundwater Remediation..	3
CONS 487 Water Resources, Management, and Design	3

Future courses developed by SUNY Canton's Civil and Environmental Technology program or other related courses - will require approval by minor coordinator at SUNY Canton

**Course offered at SUNY Potsdam, through the Department of Geology*

Esports MANAGEMENT

The Esports Management Minor provides a path for students who wish to expand their skill set to include a basic understanding of Esports Management. The areas of focus include: Esports marketing and Esports event management. Students have the opportunity to customize their minor by selecting three elective courses. The Esports Management Minor may be paired with any bachelor degree program offered at SUNY Canton, though it is best suited for business and sports management majors. Students are encouraged to enroll in the minor as early as possible to ensure efficient pairing of the Esports Management Minor with the student's respective major. *Minor available starting Spring 2026. (18 credits).

MINOR REQUIREMENTS CREDITS

REQUIRED COURSES (NINE CREDITS):

ESPT 100 Introduction to Esports Management ..	3
SPMT 307 Sports Marketing	3
ESPT 308 Applied Esports Event Management	3

SELECT THREE COURSES:

Students must choose three from this group for a total of nine credits:

BSAD 100 Introduction to Business.....	3
BSAD 203 Marketing	3
BSAD 301 Principles of Management	3
BSAD 322 Advertising and Promotion.....	3
ESPT 200 Fundamentals of Esports Technology ..	3
ESPT 210 Esports Governance	3
ESPT 300 Esports Content Creation and Shoutcasting.....	3
ESPT 301 Esports Marketing	3
ESPT 305 Esports Management Practicum.....	3
ESPT 404 Advanced Esports Management	3
SPMT 101 Foundations of Sports Management ..	3
SPMT 312 Sports Entrepreneurship.....	3
SPMT 412 Sports Sales and Sponsorships	3

FINANCE

The Finance minor will complement the skills the student gains in his or her major discipline by providing a study of financial theory and practice associated with the allocation of financial resources in a business environment.

MINOR REQUIREMENTS CREDITS

ACCT 101 Foundations of Financial Acct.	3
FSMA 210 Introduction to Finance.....	3
FSMA 312 Financial Management	3
FSMA 315 Global Investment.....	3

SELECT TWO ELECTIVES

(one elective must be a 400 upper level course)

BSAD 120 Principles of Banking.....	3
ECON 314 Managerial Economics.....	3
BSAD 315 Financial Statement Analysis.....	3
ECON 315 Global Economy.....	3
FSMA 325 Financial Compliance and Regulations.....	3
FSMA 415 Global Finance	3
FSMA 420 Financial Derivatives.....	3
FSMA 422 Risk Management.....	3

FORENSIC SCIENCE

The Forensic Science minor provides an opportunity for students to delve further into the field while still completing a degree in their primary area of interest. The Forensic Science minor is a blend of applied courses providing the student with an overview of the various disciplines,

Academic Minors

including forensic chemistry, fingerprints, questioned documents, taphonomy, and the autopsy process.

MINOR REQUIREMENTS CREDITS

JUST 210	Intro. to Forensic Investigations.....	3
CHEM 100/101	Introduction to Chemistry OR	
CHEM107/108	Forensic Chemistry	4

SELECT FOUR COURSES

JUST 300	Forensic Photography	3
JUST 301	Latent Prints and Impressions.....	3
JUST 320	Medicolegal Investigation of Death..	3
JUST330	Questioned Documents.....	3
JUST 353	Criminal Justice Technology	3
CYBR 365	Digital Forensics	3
JUST370	Forensic Taphonomy	3
JUST410	Clandestine Graves	3
JUST 411	Forensic Drug Analysis & ID	3
JUST 412	Firearms & Toolmark ID	3
JUST 426	Ethics in Forensic Science.....	3

FORENSIC VICTIMOLOGY

The Forensic Victimology minor provides an opportunity for forensic criminology students to delve further into the field to develop areas of specialization/interest in victimology and victimization. The minor may also appeal to students in Criminal Investigation, Law Enforcement Leadership or Homeland Security.

MINOR REQUIREMENTS

COURSE NAME	CREDITS
JUST 202	Introduction to Forensic Criminology
JUST 346	Forensic Victimology
JUST 350	Victimization.....

SELECT THREE COURSES

COURSE NAME	CREDITS
JUST 316	Sex Offenders
JUST 331	Profiling and Behavioral Criminology
JUST 349	Vulnerable Populations in CJ.....
JUST 422	Violent Crime Analysis.....
ENGL 305	Perpetrators and Their Victims
PSYC 275	Abnormal Psychology
PSYC 308	Personality and Individual Differences

FOUNDATIONS IN MIND-BODY WELLNESS

The Foundations in Mind-Body Wellness

minor is dedicated to the integration of theory and practice of mind-body wellness and health. The minor serves to encourage students to think critically about health, wellness, and recreation as a lifelong pursuit, and to develop personal wellness philosophies and habits.

Additional Requirements:

At least one, 1 credit Wellness (WELL) course (up to maximum of 3 credits). Must take WELL 380 Foundations in Mind-Body Health and Wellness) OR WELL 382 The Limitless Mind: Lessons on Dedication, Resilience and Mental Fortitude (3 credits). Students may take both WELL 380 and WELL 382 for academic credit.

MINOR REQUIREMENTS

Select one (up to three courses can be taken for credit)

COURSES: CREDITS

WELL 101	Yoga.....	1
WELL 102	Personal Fitness	1
WELL 103	Practicing Mindful Living and Mindfulness.....	1
WELL 104	Alternative Approaches to Mental and Physical Wellness	1

SELECT ONE (both courses can be taken for credit)

WELL 380	Foundations in Mind-Body-Health and Wellness.....	3
WELL 382	The Limitless Mind	3

SELECT AT LEAST THREE UL ELECTIVES

COURSES: CREDITS

HEFI 375	Fitness and Sports Nutrition	3
HEFI 405	Current Issues in Health and Fitness..	3
HEFI 408	Community Wellness	3
HLTH 303	Occupational Health and Safety	3
PSYC 320	Psychology of Health and Fitness.....	3
SOCI 320	Sociology of Health, Illness, and Health Care.....	3
SPMT 330	Sport Psychology	3

OTHER COURSES

BIOL 117	Human Reproduction	3
HEFI 201	Health and Wellness Promotion	3
HEFI 202	Health and Wellness Across the Lifespan	3
HEFI 203	Motor Development.....	3
HLTH 103	Health Current Perspectives.....	3
HLTH 104	Intro to Gerontology	3
HLTH 175	Basic Nutrition	3
HLTH 212	Happiness, Health & Wellbeing	3
HLTH 242	Botanical Medicine.....	3
PSYC 101	Introduction to Psychology.....	3
SPMT 202	Sport in Society	3
SSCI 181	Alcohol, Drugs, and Society	3

FRAUD EXAMINATION

The Fraud Examination Minor is attractive to students who wish to pursue a career in civil or criminal fraud investigation and white-collar crime investigations in the public or private sector. This minor provides students, particularly those in baccalaureate degree programs in Management, Finance, Legal Studies, Criminal Investigations and Criminal Justice: Law Enforcement Leadership, an opportunity to develop a degree concentration in fraud examination. MINOR REQUIREMENTS:

CREDITS

ACCT 245	Forensic Accounting	3
JUST 110	Criminal Law	3
JUST 485	Fraud Exam. and Investigation	3

SELECT THREE COURSES:

ACCT 430	Auditing	3
BSAD 319	Professional Ethics OR	
JUST 314	Ethics in Criminal Justice	3
ECON 305	Economics of Crime.....	3
FSMA 312	Financial Management	3
FSMA 325	Financial Compliance and Reg.	3
JUST 303	Investigative Interviews.....	3

GENDER STUDIES

The Gender Studies Minor is committed to broadening women's and men's knowledge and awareness of issues concerning or related to gender. From an interdisciplinary approach, the minor provides a variety of courses that emphasize the gender experience from both national and global perspectives.

MINOR REQUIREMENTS CREDITS

GRST 201	Intro to Gender Studies	3
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SELECT FIVE COURSES

(Three must be Upper Level -300 or higher)

ENGL 267	Masculinity Studies in American Literature & Culture.....	3
ENGL 304	LGBTQ Lives and Literature	3
ENGL 340	American Women Writers	3
HIST 204	U.S. Immigration History: Race, Class and Gender.....	3
HIST 304	U.S. Women's History	3
SOCI 210	Sociology of the Family	3
SOCI 300	Race and Ethnic Relations	3
SOCI 305	Gender in the Media	3
SOCI 313	Women and Aging.....	3
SOCI 330	Sociology of Gendered Lives.....	3

GRAPHIC AND MULTIMEDIA DESIGN

Students looking to enter the fields of news reporting, journalism and engineering can obtain additional skills in design, photo, and video that will enhance their marketability to prospective employers. Graphic and Multimedia Design minor students will have the opportunity to learn design and layout in the Adobe Suite of software including Photoshop, Illustrator and InDesign, as well as video production and web design and development.

MINOR REQUIREMENTS CREDITS

GMMD 102	Intro to Design	3
GMMD 201	Digital Photography	3
GMMD 302	Professional Photography.....	3
GMMD 331	Digital Illustration and Typography..	3

SELECT ONE ELECTIVE

GMMD 101	Intro to Media Studies.....	3
GMMD 211	Film Analysis	3
GMMD 330	Web Design and Development	3
GMMD 411	Digital Documentary Video	3
ARTS 301	Digital Storyboarding.....	3

**A given course may be used as either required or elective course, but not both.*

HEALTHCARE MANAGEMENT

The Health Care Management minor is available to any SUNY Canton student interested in learning more about managing healthcare organizations. The minor allows students to explore the current financial, legal, and management issues modern healthcare organizations face.

MINOR REQUIREMENTS CREDITS

BSAD 310	Human Resource Management.....	3
HSMB 101	Intro to Health Services Mgmt.	3
HSMB 301	Public Health Issues.....	3
HSMB 307	Health Care Facility Administration .	3

SELECT TWO COURSES

HSMB 302	Legal & Ethical Issues in Health Care	3
HSMB 305	Managed Care	3
HSMB 307	Health Care Financing.....	3

HISTORY

The Minor in History offers a broad course of study in Europe, American, and World History. Students can select specific course based on their area of interest. Students will complete a minimum of 18 credits, with at least one course from each of the three areas and at minimum, two upper level [300 or 400] courses from those listed below.

Europe

HIST 101	History of Europe to 1815.....	3
HIST 102	History of Europe since 1815	3
HIST 310	European City in Industrial Age	3
HIST 315	Children, Youth, and Revolution in 20th Century Europe	3
HIST 320	Twentieth Century Europe	3

United States

HIST 103	US History to 1865	3
HIST 105	US History since 1865	3
HIST 304	US Women's History.....	3
HIST 305	History of the Vietnam War	3
HIST 306	US Immigration History	3
HIST 309	African American History.....	3
HIST 375	History of Childhood and Youth in the United States	3

World

HIST 106	World History to 1500	3
HIST 107	World History since 1500.....	3

HOMELAND SECURITY

The Homeland Security Minor is most appropriate for students in public safety disciplines wishing to enhance their credentials in this important and growing area of study. Students in health, engineering technologies, legal studies, or business may also benefit from this minor. The course of study provides a survey of the issues in Homeland Security through the lens of the history of terrorism with applied courses supporting theoretical study in the discipline. While the focus of study is the responsibility of law enforcement in Homeland Security, other disciplines will find the topics interesting and timely.

MINOR REQUIREMENTS CREDITS

JUST 230	Fundamentals of HS.....	3
JUST 326	Threats to Homeland Sec.....	3

SELECT FOUR ELECTIVES

JUST 355	Public Safety Critical Incident Response	3
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JUST 375	Methods of Terrorism Through the Ages.....	3
JUST 380	Civil Liberties & Homeland Sec	3
JUST 402	Crime Mapping.....	3
JUST 415	Emerging Issues in HS.....	3
JUST 420	Corporate Role in HS.....	3
JUST 425	LE Intelligence Systems in HS.....	3
LEST 375	Law of Immigration & Border Control.....	3

HOSPITALITY MANAGEMENT

This minor allows students to build a secondary area of expertise in support of or in addition to their major discipline. This minor is also a pertinent supplement for students who wish to pursue a career in the hospitality industry.

MINOR REQUIREMENTS CREDITS (18 CREDITS)

BSAD 201	Business Law I OR	
BSAD 202	Business Law II	3
BSAD 206	Introduction to Hospitality Management	3
BSAD 302	Customer Service and the Guest Experience in Hospitality.....	3
BSAD 303	Global Tourism - Perspectives and Practices	3
BSAD 306	Food and Beverage Management	3
BSAD 407	The Meeting, Expositions, Events, and Conventions Industry	3

LEGAL STUDIES

A minor in Legal Studies will help students to reap the benefits and avoid the pitfalls of the law as it may apply to their chosen major.

MINOR REQUIREMENTS CREDITS

LEST 101	The American Legal System	3
BSAD 201	Business Law I	3
LEST 340	Constitutional Law	3

SELECT THREE ELECTIVES

(Two must be Upper Level -300 or higher)

BSAD 202	Business Law II.....	3
LEST 221	Criminal Practice.....	3
LEST 320	Negligence and Intentional Torts.....	3
LEST 350	Civil Litigation	3
LEST 360	Family Law.....	3
LEST 370	Real Property.....	3
LEST 375	Immigration Law and Border Control.....	3
LEST 380	Wills, Estates and Trusts	3
LEST 388	Environmental Law	3

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LEST 410	American Indian Law and Fed. Policy	3
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MANAGEMENT INFORMATION SYSTEMS

The Management Information Systems Minor offers students the opportunity to broaden their disciplinary program with material and skills widely useful in the business world. Information technology has been the driving force behind the new economy. It has enabled companies to make tremendous strides in productivity, opened new markets and channels, and created new products and services. While one part of the information revolution has been advances in hardware and software, another major advance has been in how information is organized and used to make effective decisions. This program helps students to broaden their exposure to information technology and its use in business and industry.

MINOR REQUIREMENTS	CREDITS
MINS 300	Management Information Systems ...3
MINS 305	Customer Relationship Management3
MINS 315	Decision Support Systems3
MINS 425	Enterprise Resource Planning3
MINS 430	Data and Knowledge Management...3

SELECT ONE COURSE

BSAD 345	Technological Innovations and Entrepreneurship	3
BSAD 372	E-Commerce	3
BSAD 373	International Business Management .3	
BSAD 375	Leadership and Change	3
CITA 330	Emerging Information Technology Applications.....	3
CITA 400	Quantitative Approaches to Management	3
CITA 460	Information Technology and Networked Economy.....	3

MARKETING MANAGEMENT

The Marketing Management Minor provides a path for students who wish to expand and enhance their marketing skill-set. The areas of focus include: advertising and promotion, consumer behavior, retail

management, and sales. Students have the opportunity to customize their minor by selecting two elective courses. The Marketing Management Minor may be paired with any bachelor degree program offered at SUNY Canton. Students are encouraged to enroll in the minor as early as possible to ensure efficient pairing of the Marketing Management Minor with their respective major.

MINOR REQUIREMENTS		CREDITS
BSAD 203	Marketing.....	3
BSAD 322	Advertising and Promotion.....	3
BSAD 325	Consumer Behavior.....	3

ELECTIVE COURSES (select two courses)

*BSAD 220	Principles of Retailing	OR
*BSAD 222	Principles of Selling	3
BSAD 330	Sales Force Management.....	3
BSAD 372	E-Commerce	3
BSAD 411	Marketing Research	3
BSAD 425	New Product Marketing	3
SPMT 307	Sports Marketing.....	3
SPMT 312	Sports Entrepreneurship	3
SPMT 412	Sports Sales and Sponsorships.....	3
SPMT 430	Advanced Sports Marketing and Sales	3
TCOM 100	Introduction to Technological Communications.....	3
TCOM 310	Identity in the Digital Age	3
TCOM 360	Online Media and Popular Culture ..3	

** A given course may be used as either a required or elective course, but not both*

MATHEMATICS

The study of mathematics develops the logic and reasoning skills that provide the tools for making decisions, interpreting observations, explaining natural phenomena, and solving problems. The Mathematics Minor provides a way for students to formally demonstrate competency in using mathematics. The minor is important for prospective employers and for use when students consider a transfer to other educational institutions. The Mathematics Minor is an important tool for the growing number of technology and business 4-year programs.

MINOR REQUIREMENTS:

A minimum of 20 credit hours is needed to complete the minor in Mathematics as follows:

CORE REQUIREMENTS	CREDITS
MATH 141 Statistics I	3
MATH 161 Calculus I	4
MATH 162 Calculus II.....	4

SELECT THREE COURSES

(at least 2 must be MATH designated)

MATH 341	Statistics II.....	3
MATH 351	Discrete Mathematics	3
MATH 361	Linear Algebra	3
MATH 364	Differential Equations.....	4
MATH 371	Graph Theory.....	3
MATH 461	Advanced Calculus	4

**Business, computer, engineering, physics courses in which mathematics plays a significant role may be selected with approval by the mathematics department*

SOCIOLOGY

This minor focuses on the systematic study of human social institutions and social relationships. Includes instruction in social theory, sociological research methods, social organization and structure, social stratification and hierarchies, dynamics of social change, family structures, social deviance and control, and applications to the study of specific social groups, social institutions, and social problems.

Students will take a minimum of 18 credit hours from the categories below.

MINOR REQUIREMENTS		CREDITS
SOCI 101	Introduction to Sociology.....	3
SSCI 370:	Research Methods in Social Sciences ...	3

SELECT 1 LOWER LEVEL ELECTIVE

SOCI 105:	American Social Problems	3
SSCI 181:	Alcohol, Drugs & Society.....	3
SSCI 271:	Contemporary Global Issues	3
SPMT 202:	Sports in Society	3

SELECT 3 UPPER LEVEL ELECTIVES

PSYC 300:	Cultural Psychology	3
SSCI 315:	Death, Dying and Bereavement	3
SOCI 210	Sociology of the Family	3
SOCI 300:	Race & Ethnic Relations	3
SOCI 305:	Gender in the Media.....	3
SOCI 308:	Sociology of Food	3
SOCI 312:	Advocacy, Activism and Social Change.....	3
SOCI 313:	Women & Aging.....	3
SOCI 320:	Sociology of Health, Illness, Healthcare	3
SOCI 325:	Sociology of Disaster	3
SOCI 330:	Sociology of Gendered Lives	3
SOCI 360:	Sustainable Development	3
SOCI 361:	Sustainable Dev. Lab in Central	

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America	1
SOCI 3/4@ Special Topics Courses: 391-395; 491-495.....	3

SUSTAINABILITY

Environmental Sustainability, the effort towards continuing economic, professional and national growth in a generational and environmentally responsible manner, is increasingly entwined with all professional fields and industries. Resource limitations, national/international demand and population growth will continue to assert its resulting implications on contemporary lifestyles and economy. Graduates who are well versed in sustainability concerns will be more competitive in the job market.

MINOR REQUIREMENTS	CREDITS
ESCI 101 Introduction to Environmental Science	3
ESCI 102 Introduction to Environmental Science Lab.....	1
GMMD 421 Sustainability Design	3

SELECT FOUR ELECTIVES

(TWO MUST BE UPPER LEVEL - 300 OR HIGHER)

ANTH 102 Introduction to Cultural Anthropology	3
AREA 110 Intro To Alternative Energy	3
EADM 205 Risk & Hazard Impact Studies	3
ECON 201 Economics and Social Issues	3
GMMD 101 Introduction to Media Studies	3
HIST 101 History of Western Heritage	3
POLS 101 Introduction to Political Science	3
SOCI 105 American Social Problems	3
SOCI 250 Sociology of a Mass Media.....	3
SSCI 271 Contemporary Global Issues.....	3
BSAD 319 Professional Ethics.....	3
BSAD 325 Consumer Behavior.....	3
BSAD 375 Leadership and Change	3
ECON 320 Environmental Economics.....	3
ESCI 320 Weather, Climate and Climate Change.....	3
GMMD 302 Digital Photojournalism	3

VETERINARY SERVICE ADMINISTRATION

The Veterinary Service Administration Minor provides students with an interest in Business and/or Veterinary Technology with a background in Business and Accounting, then turns the focus to Veterinary

Management specifically. This Minor allows students with the desire to manage a veterinary clinic or other animal care facility to prepare themselves to undertake a position in this area of management.

MINOR REQUIREMENTS CREDITS

ACCT 101 Foundation of Financial Accounting..	4
BSAD 201 Business Law I	3
BSAD 310 Human Resource Management.....	3
VSAD301 Veterinary Practice Management	3
VSAD 302 Animal Care Institution Management	3
VSAD 402 Veterinary Business & Financial Management	3

WRITING AND COMMUNICATION

The Minor in Writing and Communication trains students in the written communication skills sought by employers and necessary for responsible citizenship. The coordinator will work with you to tailor a minor appropriate to your degree program, career plans, and personal interests.

Students will take a minimum of six of the courses designated below, with at least one course from each of the three areas:

MINOR REQUIREMENTS CREDITS HUMANITIES

ENGL 202 Creative Non-Fiction.....	3
ENGL 216 Children's Literature	3
ENGL 221 Creative Writing.....	3
ENGL 315 Short Fiction: The Art of the Tale	3
ENGL 350 Flash Fiction.....	3
ENGL 351 Advanced Fiction Workshop	3
HUMA189 Acting and Improvisation	3
SPCH 104 Introduction to Speech.....	3

VISUAL COMMUNICATION/NEW MEDIA

ENGL 270 Media Writing	3
ENGL 314 Digital Graphic Storytelling.....	3
TCOM 200 Narrative in Video Games	3
TCOM 290 Mobile Media Stories and Games	3
TCOM 310 Identity in the Digital Age.....	3
TCOM 350 Electronic Literature: From Cybertext to Video Games	3
TCOM 360 Online Media and Popular Culture ..	3

PROFESSIONAL AND INTERCULTURAL COMMUNICATION

AMSL 101 Introduction to American Sign Language	3
ENGL 301 Professional Writing and Communication	3

ENGL 302 Global Englishes	3
ENGL 309 Journalism	3
ENGL 380 Intercultural Communication	3
FREN 101 Contemporary French I.....	3
LEST 330 Legal Writing.....	3
SPAN 101 Contemporary Spanish I.....	3
SPAN 102 Contemporary Spanish II	3

Microcredentials

Stand out in the job market by adding in-demand new skills to your resume. Designed to be completed in months, not years, microcredentials are a great way to show current and future employers that you have mastered a specific subject or gained a valuable skill. They are academic credentials, recorded on official transcripts, that can stand alone or be applied to advanced degrees. Additional information on microcredentials can be found online at www.canton.edu/academics/micro/.

ARTIFICIAL INTELLIGENCE

In this microcredential, dive into the intricate world of conversational AI, encompassing the nuances and advancements of ChatGPT and broader AI methodologies. Begin by demystifying the underlying mechanisms of Chat GPT, probing its transformative role in modern AI communication. Progressively transition to a holistic study of advanced AI techniques that empower and refine conversational models. Concluding your journey, engage in an evaluative exploration of real-world applications, highlighting the innovative synergy of Chat GPT with other AI paradigms, challenges faced, and the best practices adopted by industry pioneers.

REQUIRED COURSES

DATA 240: AI Fundamentals
DATA 422: Advanced AI and ChatGPT

ARTIFICIAL INTELLIGENCE AND COMMUNICATIONS

This microcredential is designed for anyone interested in working in artificial intelligence (AI) related field, requiring AI literacy and good communication skills, including, but not limited to, Artificial Intelligence Engineering, Communications, Public Relations, Multimedia Design, Business, Marketing, and Legal Studies.

REQUIRED COURSES

ENGL 370: Artificial Intelligence & Communication
ENGL 301: Professional Writing & Communication

BIG DATA

In this microcredential you will explore the concepts, methods and approaches to big data. First, you'll focus on the feasibility, usefulness, effectiveness, and scalability of techniques associated with large data sets. Then, through a review of big data applications you will focus on different types, challenges and best practices in the field.

REQUIRED COURSES: CREDITS

DATA 315 Data Mining & Machine Learning...3
DATA 321 Big Data Fundamentals3

CAMPAIGNING AND COMMUNITY ADVOCACY

Campaign for a better future in the Campaigning & Community Advocacy microcredential where you will gain an understanding of working in the non-profit sector, specifically focusing on social justice and advocacy campaigns. First, you'll develop an understanding of both national and international social movements while engaging in advocacy and activism. Then, you will examine key management concepts used to contend with challenges encountered in domestic and/or global environments. Finally, you will study leadership paradigms and contingency leadership models. This microcredential is intended for anyone interested in learning about social justice and advocacy campaigns

REQUIRED COURSES

BSAD 301 Principles of Management3
SOCI 312 Advocacy, Activism, and
Social Change3
BSAD 375 Leadership & Change3

CHILD CARE

Taking your first step is an amazing start in the Child Care microcredential where you will gain knowledge on the development and needs of children ages infancy to five years old. First, you will study the history, theories and philosophies that form the foundation of early childhood care and education. Then, through development of skills ensuring the well-being of a young child, you will focus on health, safety and nutrition to support a healthy lifestyle. Finally, you will explore the core competencies of the infant-toddler caregiver and the caregiver and family relationship. You will also gain an understanding of state policies and regulations as established by

the NYS Office for Children and Family Services. This microcredential is intended for anyone interested in working in the early childcare field, including participants in the St. Lawrence County Child Care Training Program. The child care microcredential does not count for CDA credit.

REQUIRED COURSES: CREDITS

ECHD 101 Introduction to Early Childhood.....3
ECHD 121 Wellness in Young Children.....3
ECHD 131 Infants and Toddlers.....3

CREATIVE WRITING

In the creative writing microcredential you will hone your written communication skills and develop a deeper understanding of the literary arts. First, you will learn to master your craft by writing poems and short stories. Then you will explore the short fiction genre by writing your own short story to gain perspective on the literary form, ideas expressed within that form, and the creative process used to produce that form.

REQUIRED COURSES

ENGL 221: Creative Writing3
ENGL 350: Flash Fiction3

CYBERSECURITY AND RECOVERY IN HEALTHCARE

Keep your health data safe in cyberspace in the cybersecurity and recovery in healthcare microcredential where you will gain an understanding of the need for data security and protection of patients' records in health care information systems as the industry continually faces cyber threats and emergencies. First, you'll learn about health information systems and technology in healthcare delivery and public health. Then, you will examine current threats and trends, providing insight as to why healthcare is such a target rich environment and discuss ways to mitigate the risk. Finally, you will analyze past incidents and discuss

strategies to prepare for, respond to, and recover from health and other emergencies. This microcredential is intended for health care working professionals who want to gain additional skills required for responding to cybersecurity disasters.

REQUIRED COURSES	CREDITS
HSMB 311 Healthcare Information Technology....3	
EADM 330 Emergency Mgmt. in Public Health and Healthcare	3
CYBR 416 Cybersecurity in Healthcare.....	3

CYBERSECURITY PRINCIPLES

Secure your future in the cybersecurity principles microcredential where you will gain valuable knowledge in distinct phases of information security and assurance from both technical and business aspects. First, you'll be exposed to a spectrum of information security activities, methodologies and procedures. Then, by examining best practice framework you will better understand how the various functions within cybersecurity can be combined and leveraged to secure an organization. This microcredential is intended for working professionals who want to gain additional skills pertaining to the cybersecurity field.

REQUIRED COURSES:	CREDITS
CYBR 250 Information Security	3
CYBR 450 Cybersecurity Body of Knowledge....	3

DATA MINING AND MACHINE LEARNING

In this microcredential you will explore the concepts and techniques in Data Mining and Machine Learning. First, you'll focus on the feasibility, usefulness, effectiveness, and scalability of techniques associated with data analysis in general. Then, through a review of advanced data mining and machine learning concepts, methods, and approaches you will comprehend applying new methods where the common methods are not sufficient in prediction and classification.

REQUIRED COURSES	CREDITS
DATA 315 Data Mining & Machine Learning....	3
DATA 420 Advanced Data Mining & Machine Learning.....	3

DATA SCIENCE

Collect the data to improve your credentials in the Data Science microcredential where you will learn the distinct phases of data science from both technical and business aspects. First, you'll learn the concept of data mining and the methods of knowing, preprocessing, processing and warehousing data. Then, by examining ethical considerations, you'll assess collection, storage, use and analysis of data. This microcredential is intended for working professionals who want to incorporate data science into their employment field.

REQUIRED COURSES	CREDITS
DATA 315 Data Mining and Machine Learning 3	
DATA 415 Ethics for Data Science.....	3

DATA SCIENCE FOR BEGINNERS

Rationale: In the data science for beginners microcredential you will explore the fundamentals of data science. First, you'll focus on the definition and main concepts associated with data science. Then, through R programming you will practice statistical modeling concepts relevant to data science analysis.

REQUIRED COURSES:	CREDITS
DATA 155 Survey of Data Science	3
DATA 230 Applied Data Science - R Programming.....	3

DEATH INVESTIGATION

Investigate your potential in the Death Investigation microcredential where you will look into the medico-legal aspects of death investigations. First, you'll analyze the manners, mechanisms and causes of death associated with postmortem changes. Then, based on your career desires and interests, you'll tailor the second portion of the microcredential by selecting either violent crime analysis or cold case investigation. In violent crime analysis you will analyze criminal justice data to understand criminal classifications and how research can assist in an investigation. In cold case investigation you will evaluate cold case files while incorporating advancements in

forensic science and criminal investigation techniques. This microcredential is intended for working professionals who want to gain additional skills pertaining to death investigation scenes.

CORE REQUIREMENTS

REQUIRED COURSES	CREDITS
JUST 320 Medico-Legal Investigation of Death 3	
SELECT ONE	
JUST 422 Violent Crime Analysis.....	3
JUST 424 Cold Case Investigation.....	3

DEEP LEARNING

In this microcredential you will explore the concepts and techniques in processing gathered data or information. First, you'll focus on the feasibility, usefulness, effectiveness, and scalability of techniques associated with large data sets. Then, through a review of deep learning concepts, methods, and approaches you will comprehend deep learning applications in prediction and classification.

REQUIRED COURSES:	CREDITS
DATA 315 Data Mining & Machine Learning....	3
DATA 421 Deep Learning Fundamentals.....	3

DIRECT SUPPORT PROFESSIONAL I

The Direct Support Professional 1 (DSP1) microcredential will enable students to demonstrate competency in several key areas including understanding human services organization structures and functions, ethical behavior in the workplace, and the importance of interpersonal communication skills.

In addition to working with individuals with developmental disabilities, direct support professionals may work in childcare centers, day treatment programs for persons with mental illness, residential treatment facilities, eldercare and respite programs, jails and alternative correction programs, short-and long-term rehabilitation centers, crisis centers, day habilitation programs, assisted living/skilled nursing facilities and other human service settings. The DSP 1 microcredential provides training to increase the potential for advancement within these organizations.

Microcredentials

REQUIRED COURSES

HUSV 201	Introduction to Human Services	3
HSMB 200	Medical Terminology	3

DIRECT SUPPORT PROFESSIONAL II

The Direct Support Professional II (DSP II) microcredential will enable students to develop counseling and case management techniques by learning in-tentional interviewing strategies and effective intervention skills using a strengths-based perspective. They will learn to address critical practice, policy and research topics in the human services field as they emerge in a range of practice locations. Students will be able to fulfill the 50 hours of educational requirements for the completion of the National Alliance of Direct Support Professional (NADSP) DSP II accreditation. Completion of the DSP I microcredential is required to move into the DSP II microcredential.

The DSP II microcredential is funded through an OPWDD grant requiring affiliation with an organization that has signed an OPWDD provider agreement with SUNY Canton for completion of NADSP badges

REQUIRED COURSES

HUSV 305	Professional & Ethical Responsibilities in Human Service	3
PSYC 101	Introduction to Psychology	3

DIRECT SUPPORT PROFESSIONAL III

The Direct Support Professional III (DSP1) microcredential is the highest level of credential demonstrating a deep commitment to the people they support. They will learn the importance of empowerment & advocacy, address community living skills, identify various cultural competencies and emerge with education, training and self-development within the field. This microcredential can only be completed if DSP I and DSP II have been successfully achieved.

The DSP III microcredential is funded through an OPWDD grant requiring affiliation with an organization that has signed an OPWDD provider agreement with SUNY

Canton for completion of NADSP badges

REQUIRED COURSES

ABAP 245	Introduction to Applied Behavior Analysis	3
PSYC 275	Abnormal Psychology	3

DIVERSE PERSPECTIVES

Understanding and appreciating the experiences, values, and challenges of people from different back-grounds requires exposure to diverse perspectives. This is particularly crucial for understanding marginalized identities tied to race, ethnicity, and gender identity. Greater understanding and awareness allows for collaboration and mutual understanding in social and professional settings. This microcredential provides an opportunity for participants to enhance awareness of diverse perspectives and intercultural frameworks, across disciplines. Participants will develop skillsets for acting and communicating with intention to foster inclusive environments where people feel valued, respected, and included.

REQUIRED COURSES

SOCI 300	Race and Ethnic Relations: American and Global Perspectives	3
SSCI 401	Diverse Perspectives Capstone	1
	Gender/Sexuality Course*	3
	Diversity Specialization Elective Course**	3

*Select one: ENGL 304, HISDT 325, GRST 201, SOCI 330

**Select one: ANTH 102, ECHD 302, ENGL 215, ENGL 225, ENGL 266, ENGL 307, ENGL 321, HIST 304, HIST 306, HIST 309, HIST 321, HSMB 316, JUST 201, JUST 322, JUST 323, JUST 349, PSYC 300, SOCI 313, SSCI 221, SSCI 250, SSCI 271, SSCI 275

EMERGENCY MANAGEMENT

Lead disaster preparedness, response, & recovery in the Emergency Management microcredential where you will gain valuable knowledge in the distinct phases within emergency management science. First, you'll learn about the theory and practice of coordination of activities such as hazard and vulnerability assessments, emergency operations planning, strategic mitigation strategies and resource management. Then,

you will focus on proactive measures to safeguard lives and assets from natural or man-made disasters and develop a comprehensive emergency management plan. Finally, through case study analysis, you will assess short and long-term recovery strategies and community and organizational resilience for future disasters. The microcredential is intended for working professionals who want to gain additional skills pertaining to the emergency management field.

REQUIRED COURSES CREDITS

EADM 205	Hazard Assessment and Mitigation	3
EADM 220	Emergency Planning	3
EADM 222	Emergency Management and Response	3
EADM 320	Recovery and Resilience	3

ETHICS AND PRIVACY IN DATA SCIENCE

In this microcredential you will explore the complex environment of legal and ethical data choices. First, you'll describe security and privacy as it relates to data collection to better understand legal requirements and ethical codes. Then, through case studies and discussions you will learn the complications of data collection in modern society and build a set of ethical values that can be applied to prevent data discrimination and biased-judgement.

REQUIRED COURSES: CREDITS

DATA 320	Data Security & Privacy	3
DATA 415	Ethics in Data Science	3

FICTION WRITING

In the fiction writing microcredential you will hone the knowledge and skills developed in previous creativewriting and literature courses. First, you will explore the short fiction genre and write your own short stories. Then you will have a disciplined, creative environment focusing on the craft of writing fiction where you will read published stories and provide constructive feedback on peer writings in a workshop setting.

REQUIRED COURSES

ENGL 315	Short Fiction: Art of the Tale	3
ENGL 351	Advanced Fiction Workshop	3

FORENSIC ACCOUNTING

Rule out risky business in the Forensic Accounting microcredential where you will gain knowledge of fraud prevention, detection and correction of financial fraud and white-collar crime activities. First, you'll identify areas of financial risk, develop internal control policies and procedures, and define the role of the forensic accountant in the courtroom. Then, by utilizing an accounting software system, you'll prepare the necessary source documents, journal entries, special journals, reconcile accounts, generate financial statements and close an entire accounting cycle. This microcredential is intended for working professionals who want to expand their expertise in forensic accounting.

REQUIRED COURSES	CREDITS
ACCT 245 Forensic Accounting	3
ACCT 310 Accounting Information Systems.....	3

FORENSIC ANTHROPOLOGY

No bones about it: dig a new training in the Forensic Anthropology microcredential where you will gain knowledge in the area of locating, excavating, collecting and analyzing human remains. First, you will analyze forensic taphonomy, including an overview of forensic anthropology and archaeology. Then, you will learn the theories and practices of locating clandestine graves. Finally, you will study human skeletal identification methods, such as biological profile, radiographic comparison, craniofacial superimposition, stable isotopes and DNA. This microcredential is intended for anyone who wants to gain additional skills pertaining to forensic anthropology techniques.

REQUIRED COURSES	CREDITS
JUST 370 Forensic Taphonomy	3
JUST 410 Clandestine Graves	3
JUST 413 Human Identification Methods	3

FORENSIC DRUG TESTING

Test your way to a new certification in the forensic drug testing microcredential where you will gain hands-on skills at the field-testing level and knowledge of testing in the forensic laboratory. First, you

will learn forensic drug testing techniques and complete training that results in NIK Polytesting System of presumptive drug identification certification. Then, you will explore the tools and methods involved with drug investigations and forensic analysis. This microcredential is intended for anyone interested in obtaining NIK presumptive drug identification certification.

REQUIRED	CREDITS
JUST 210 Intro. to Forensic Investigation	3
JUST 411 Forensic Drug Analysis and Investigation	3

GRANT WRITING

Show Me the Money! The Grant Writing Microcredential provides participants with knowledge of the process and procedures for seeking grants including types of projects that generally are funded and sources utilized to identify prospective funders. Participants gain an understanding of the essential components of a well written grant including a needs statement, clear goal and objectives related to a project, budget development, and an evaluation tool for measuring outcomes.

REQUIRED	CREDITS
SSCI 320 Grant Development Strategies	3

HEALTHCARE LEADERSHIP

Learn to lead in the Healthcare Leadership microcredential where you will examine current challenges in health care that impact health care access, cost, quality and patient experiences. First, you will learn the fundamentals of the financial management of health care organizations. Then, you will examine socioeconomic factors, which contribute to health disparities, healthcare access, and lack of sufficient diversity in health care while evaluating the current challenges in health care that impact access, cost, quality and patient experience. Finally, you will focus on communicating strategically and persuasively in a professional environment. This microcredential is intended for health care working professionals who want to gain additional skills required for leadership positions.

REQUIRED

BSAD 340 Management Communications	3
HSMB 306 Healthcare Financing.....	3
HSMB 316 Equity, Diversity and Cultural Competence in Healthcare	3
HSMB 317 Current Challenges in Health Care...	1

CREDITS

HEALTHCARE PRACTICE MANAGEMENT

The Healthcare Practice Management microcredential recognizes the completion of a three-course sequence covering medical terminology, coding, healthcare financing, and healthcare practice management concepts. The microcredential provides the necessary skills to obtain employment in various healthcare settings.

REQUIRED CREDITS

HSMB 200 Medical Terminology.....	3
HSMB 306 Healthcare Finance	3
HSMB 312 Medical Practice Management	3

INVESTIGATIVE ANALYSIS

Analyze your potential in the investigative analysis microcredential where you will gain hands-on skills associated with forensic investigations. First, you will learn digital camera techniques for taking proper forensic photographs and explore latent print processing, including rolling fingerprints, processing evidence and classification. Then, you will study investigative interviews used in forensic science and law enforcement settings. Finally, to build teamwork you will learn protocols for crime scene processing and investigation of death scenes. This microcredential is intended for students enrolled in the Bachelor of Technology in Criminal Investigation degree program.

REQUIRED COURSES

JUST 300 Forensic Photography	3
JUST 301 Latent Prints and Impressions.....	3
JUST 303 Investigative Interviews.....	3
JUST 406 Crime Scene Investigations.....	3
JUST 408 Investigation of Death	3

MEDICAL CODING

Answer the code and enroll in the Medical Coding microcredential where you will gain the necessary skills to obtain employment in various healthcare settings and be

Microcredentials

prepared to take the American Health Information Management Association (AHIMA) and the American Academy of Professional Coders (AAPC) certification exam. First, you'll learn the language of medical terminology and the tools a coder uses to report inpatient and outpatient diagnoses and procedure services to health plans. Then, you will examine technology for planning, selecting, building and implementing the health information systems' platforms for direct patient care and management of hospital and public health sectors. Finally, you study the human body with an emphasis on structure and general function. This microcredential is intended for anyone interested in gaining the necessary education and skills to enroll in the American Health Information Management Association (AHIMA) and the American Academy of Professional Coders (AAPC) certification exam.

REQUIRED COURSES	CREDITS
BIOL 207 Human Anatomy.....	3
HSMB 200 Medical Terminology & Coding.....	3
HSMB 315 Medical Coding	3

NETWORK SECURITY

Secure your network of credentials in the Network Security microcredential where you will learn the distinct phases of network intrusion, detection, prevention, control and countermeasures. First, you'll identify vulnerabilities within computer networks and the countermeasures that mitigate risks and damage. Then, by examining the latest technology, trends, and techniques you'll develop a plan to stay one step ahead of potential security threats. This microcredential is intended for working professionals who want to gain additional skills pertaining to the network security field.

REQUIRED	CREDITS
CYBR 354 Cyber Incident Response and Disaster Recovery	3
CYBR 356 Cybersecurity Defense and Countermeasures	3

NURSING HOME ADMINISTRATION

Lead the future of elder care in the Nursing Home Administration microcredential

where you will gain the necessary skills for the educational portion of the Department of Health's (DoH) requirement to complete the Nursing Home Administrator Licensure Program in New York State. First, you'll examine legal and ethical issues in healthcare and the fundamentals of financial management of health care organizations. Then, you will analyze nursing home administration with a specific focus on operational management, finance, residential care and environmental management. Finally, you will study human capital management, including job analysis, recruiting, training, motivating employees, performance appraisals and compensation issues. This microcredential is intended for health care working professionals who want to gain the necessary educational requirements for the Nursing Home Administrator Licensure Program in New York State.

REQUIRED COURSES	CREDITS
HLTH 104 Intro. to Gerontology.....	3
HSMB 302 Legal & Ethical Issues in Healthcare .3	
HSMB 306 Healthcare Finance.....	3
HSMB 309 Nursing Home Administration	3
BSAD 310 Human Resource Management	3

NY STATE COACHING CERTIFICATION

The NY State Coaching microcredential prepares you for interscholastic athletics. With successful completion of the three courses students can earn their NYSED Coaching Certification once they also become Red Cross certified in First Aid and CPR and complete a sport specific course through the National Federation of State High School Associations. Students will be directed how to complete the certification process as part of the micro credential courses.

REQUIRED	CREDITS
SPMT 244 Philosophy, Principles, and Organization of Athletics in Education	3
SPMT 245 Theories & Techniques of Coaching .3	
SPMT 246 Health Sciences for Coaching	3

NYS SPORTS OFFICIATING

The officiating microcredential provides participants with the training and practi-

cal experience in officiating sports and the knowledge and expertise necessary to officiate with the New York State Public High School Athletic Association. This microcredential is based on the best practices pertaining to the National Federation, RefRep and the New York State Public High School Athletic Association. Participants will learn the fundamentals of sports officiating to step on the field or court with confidence. This microcredential engages learners in the fundamental definitions, rules and mechanics of sports officiating needed to take the first step in becoming a NYS certified sports official.

A portion of this microcredential will use the RefReps Officiating Education System to deliver video-based interactive online modules on a Learning Management System created by RefReps. Each module is aligned with the corresponding sections of the NFHS Rule book for the sport and includes down-loadable resources which deepens the learner's understanding of the topic.

REQUIRED	CREDITS
SPMT 245 Sports Officiating	3

PEER SUPPORT FOR HEALTH AND WELLNESS

In this Microcredential, students will explore the core knowledge and skills needed to provide peer support to improve quality of life and promote holistic wellness, including: health and wellness, health communication, health literacy basics, characteristics, competencies, and resources that impact health and wellness, the peer role in health and wellness, and how to create and join a learning collaborative for health and wellness promotion. First, students will learn about the psychology of health. Then they will learn about the NY Peer Specialist process for certification while using the health & wellness modules as a guide. This microcredential does not lead to certification but will provide a foundation for seeking future NY Peer Specialist certification.

The Peer Support for Health & Wellness microcredential is funded through a Mother Cabrini grant requiring individuals to meet

the mission of peer support by having a lived experience in the discipline and either working the field and/or seeking employment in the field.

REQUIRED	CREDIT
PSYC 295 Peer Support for Health and Wellness	1
PSYC 320 Health Psychology; OR	3
HEFI 201 Health and Wellness Promotion	

PEER SUPPORT FOR OLDER ADULTS

In this Microcredential, students will explore the core knowledge and skills needed to provide peer support to older adults, including: promoting health aging, foundations in aging, recognizing ageism, aging experiences, motivational approaches and personal growth, and how to create and join a learning collaborative. First, students will learn community psychology and explore the many roles within communities to address various social issues relevant to urban and rural environments. Then they will learn about the NY Peer Specialist process for certification while using the older adult modules as a guide. This microcredential does not lead to certification but will provide a foundation for seeking future NY Peer Specialist certification.

The Peer Support for Older Adults microcredential is funded through a Mother Cabrini grant requiring individuals to meet the mission of peer support by having a lived experience in the discipline and either working the field and/or seeking employment in the field.

REQUIRED	CREDITS
PSYC 296 Peer Support for Older Adults	1
PSYC 395 Community Psychology; OR.....	3
HLTH 104 Introduction to Gerontology	

TRUE CRIME

It'd be a crime not to enroll in the true crime investigation microcredential where you will expand your knowledge of criminal investigations situated within a contemporary, real-world context, with a focus on homicide and serial crime. First, you will examine real-world crime and its treatment throughout the stages of the justice process.

Then, based on your career desires and interests, you'll tailor the second portion of the microcredential by selecting either serial murderers & their victims or profiling & behavioral criminology. In serial murderers & their victims you will analyze categories of crime, including male vs female, team, healthcare and international killers. In profiling & behavioral criminology you will explore the nature, history and methods of criminal profiling. This microcredential is intended for anyone interested in true crime or for working professionals who want to gain skills associated with investigations.

REQUIRED COURSES	CREDITS
JUST 339 True Crime Investigation.....	3

SELECT ONE

COURSE NAME	CREDITS
JUST 324 Serial Murderers and their Victims....	3
JUST 331 Profiling and Behavioral Criminology	3

Course Descriptions

This represents a listing of courses available to the campus at large. Courses fulfilling General Education Requirements of the ten SUNY knowledge and skill areas are designated as: GER 1 & 2 - Basic Communication, Written and Oral, GER 3 - Diversity, GER 4 - Mathematics, GER 5 - Natural Sciences, GER 6 - Humanities, GER 7 - Social Sciences, GER 8 - Arts, GER 9 - US History and Civic Engagement, GER 10 - World History and Global Awareness, GER 11 - World Languages, GER 12 - Critical Thinking (infused), GER 13 - Information Management (infused)

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ABAP Applied Psychology.....	131	GMMD Graphic and Multimedia Design.....	171
ACCT Accounting.....	132	GRST Gender Studies.....	173
ACHP Air Conditioning.....	133	HEFI Health and Fitness Promotion.....	173
AGET Agricultural Equipment.....	133	HIST History.....	175
AGMT Agribusiness Management.....	133	HLTH Health-Related.....	176
AMSL American Sign Language.....	134	HSMB Health Care Management.....	177
ANTH Anthropology.....	134	HTMT Hospitality and Tourism Management.....	141
AREA Alternative and Renewable Energy Systems.....	134	HUMA Humanities.....	178
ARTS Arts.....	135	HUSV Human Services.....	178
ASTR Astronomy.....	135	HVAC Heating, Ventilation and Air Conditioning.....	179
AUTO Automotive.....	136	INTL Independent Study/Study Abroad.....	180
BIOL Biology.....	137	JUST Criminal Justice/Investigation/Law Enforcement.....	180
BSAD Business/Management.....	138	LEST Legal Studies.....	186
CHEM Chemistry.....	141	LPNC Licensed Practical Nursing.....	187
CITA Computer.....	142	MATH Mathematics.....	188
CIVL Civil Engineering.....	146	MECH Mechanical.....	189
CMGT Construction Management.....	148	MINS Management Information Systems.....	145, 146
CONS Civil/Construction.....	150	MKTX Mechatronics.....	161, 191
CYBR Cybersecurity.....	152	MSPT Powersports.....	192
DATA Data Science.....	154	MUSC Music.....	192
EADM Emergency Management.....	154	NCR Non-Credit/WCIP.....	192
ECHD Early Childhood.....	155	NURS Nursing.....	193
ECMR Electricity for Trades.....	157	PHTA Physical Therapist Assistant.....	194
ECON Economics.....	158, 170	PHYS Physics.....	195
EDUC Education.....	159	POLS Political Science.....	196
ELEC Electrical.....	159	PSYC Psychology.....	197
ENGL English.....	161	SOCI Sociology.....	198
ENGM Mathematics for Engineering Applications.....	165	SOET School of Engineering Technology.....	141, 199
ENGS Engineering Science.....	165	SPAN Spanish.....	200
ESCI Environmental Science.....	166	SPCH Speech.....	200
ESOL English as a Second Language.....	166	SPMT Sports Management.....	200
ESPT Esports Management.....	166	SSCI Social Science.....	203
FLHT Flight.....	167	TCOM Technological Communication.....	163-165, 204
FREN French.....	167	VAST Veterinary Assisting.....	205
FSAD Funeral Services.....	167	VSAD Veterinary Management.....	205
FSMA Finance.....	169	VSCT Veterinary Technology.....	205
FYEP First Year Experience.....	170	WELD Welding.....	207
GAME Game Design and Development.....	170	WELL Wellness.....	208
GEOL Geology.....	171	YOGA Yoga.....	208

ABAP 135 **PARENTING KNOWLEDGE & SKILLS** *Fall/Spring, 3 credit hour(s)*

This course examines the application of the natural science and technology of behavior to improvements both in knowledge of parenting and in childrearing skills. The range of advances in behaviorologically- based child rearing practices discovered since the 1950's is covered after reviewing scientifically uninformed practices used earlier. Behavior management-related skills for application in everyday public and personal situations involving children and their caregivers are included.

ABAP 245 **INTRODUCTION TO THE** **SCIENCE AND TECHNOLOGY OF** **BEHAVIOR** *Fall/Spring, 3 credit hour(s)*

The first of a two course sequence, this course introduces students to the natural science and technology of behavior, behaviorology, encompassing the areas of fundamental principles, basic methods and measurements, and elementary technologies of applied behavior analysis including techniques applied in prevention and intervention settings, plus historical and philosophical perspectives, ethics, and current trends.

ACCT 101 **FOUNDATIONS OF FINANCIAL** **ACCOUNTING** *Fall/Spring, 4 credit hour(s)*

This course builds the underlying framework of financial accounting and serves as an introduction to accounting concepts and financial reporting. Students will learn how to record business transactions in an accounting system, interpret financial statements, and communicate information for economic decision-making. Topics include accounting for sole proprietorships, partnerships, and corporations. A concentrated emphasis is placed on the accounting cycle, accruals and deferrals, notes and interest, and internal controls.

Course Descriptions: Accounting

ACCT 102 FOUNDATIONS OF MANAGERIAL ACCOUNTING

Fall/Spring, 3 credit hour(s)

The basic principles of accounting are continued with their application to management and internal users to assess company performance. Managerial accounting focuses on providing accounting related data for decision-making, production management, and product/service pricing. Additional topics are: job-order costing, process costing, budgeting, and variance analysis.

Prerequisites: Foundations of Financial Accounting (ACCT 101) or permission of instructor

ACCT 104 SURVEY OF ACCOUNTING

Fall/Spring, 3 credit hour(s)

This course is designed for non-business majors who need to develop an understanding of fundamental accounting principles and their application in the business environment. The content surveys both financial and managerial accounting with an emphasis placed on how the information is used in decision making and problem solving. (Course may not be used for credit in any one of the following programs: Accounting, Business Administration, Finance, Legal Studies, and Health Care Management.)

ACCT 242 ACCOUNTING FOR GOVERNMENT AND NONPROFIT ORGANIZATIONS

Fall/Spring, 3 credit hour(s)

This course is designed to introduce students to the Internal Revenue Code, preparation of federal and state tax returns for individuals and small businesses. The course prepares students to participate in the IRS Volunteer Income Tax Assistance (VITA) program.

Prerequisites: Foundations of Financial Accounting (ACCT 101) and knowledge of spreadsheets.

ACCT 245 FORENSIC ACCOUNTING

Fall/Spring, 3 credit hour(s)

Forensic Accounting is concerned with the detection, prevention, and correction of financial fraud and white-collar crime activities. This course identifies areas of financial risk, develops internal control policies and procedures, as well as defines the role of the forensic accountant in the courtroom. Students will also spend time evaluating forensic accounting case studies, determining damage calculations, and the affects of cybercrime on an organization.

Prerequisites: ACCT 101 or ACCT 104 or permission of instructor.

ACCT 300 INTERMEDIATE ACCOUNTING I

Fall, 3 credit hour(s)

Students will be presented with knowledge and skills basic to accounting theory and practice and advanced problems pertaining to the foundations of financial. The essential interrelationship between accounting and the activities of business is stressed throughout the course. The presentation of accounting elements necessary for business decision-making such as operating, financing, investing, earnings management and revenue recognition enhance the learning experience and prepare students for an evolving accounting profession. Accompanying

accounting problems and various financial statements challenge students to develop critical thinking skills and promote core competencies. International Financial Reporting Standards are discussed when relevant to help students understand how accounting practices differ from country to country and reflect the increasingly global nature of business.

Prerequisites: ACCT 102 or permission of instructor.

ACCT 302 INTERMEDIATE ACCOUNTING II

Spring, 3 credit hour(s)

Accounting concepts and standards which expound upon the foundation provided by Intermediate I are carried forward in this course. This course provides an engaging and comprehensive learning experience that helps develop essential understanding, critical thinking, and analytical skills via accounting's integral importance to an organization's decision-making capabilities and is presented as an essential element in business decision-making. Focus is placed on financing and investing activities such as: the behavior and classification of capital, acquisition management, general ledger requirements for the handling of non-current operating assets, handling of debt and equity securities, and accounting for common disclosures.

Prerequisites: ACCT 300 or permission of instructor.

ACCT 305 ACCOUNTING THEORY & PRACTICE

Spring, 3 credit hour(s)

This course is designed to assess and reinforce the skills necessary to enter the workplace as an entry-level employee in the field of Accounting. The students will maintain a complete set of books and related financial statements, through an accounting cycle, both manually and electronically. Students will use previously prepared financial statements to make informed judgments, solve problems, identify and apply ethical positions and effectively communicate this information to others both orally and in writing.

Prerequisites: ACCT 300, BSAD 340, CITA 110, FSMA 210, MATH 106, or MATH 108, or permission of instructor

ACCT 306 COST ACCOUNTING

Fall, 3 credit hour(s)

This course is designed to expose the student to cost behavior, the elements of a cost, and cost classification on financial statements. The student will learn the responsibilities of a cost accountant and distinguish those of a financial and managerial accountant. Emphasis is placed on various cost models (job-order, process costing, activity based costing), preparing budgets and analyzing variances to standards as essential tools to formulating and achieving management goals and objectives in both manufacturing and service enterprises.

Prerequisites: MATH 106, MATH 108, or permission of instructor

ACCT 310 ACCOUNTING INFO SYSTEMS

Fall/Spring, 3 credit hour(s)

Students utilize an accounting software system complemented by a manual accounting information system to complete a full accounting cycle. Heavy emphasis is placed on section 404 requirements of

the Sarbanes-Oxley Act of 2002. The importance of proper documentation, internal controls, enterprise systems, and an examination of E-business sets the stage for this course. Students prepare the necessary documents (electronically and manually), journal entries, special journals, reconcile accounts, generate financial statements, and close an entire accounting cycle.

Prerequisites: ACCT 102, or permission of the instructor

ACCT 335 INDIVIDUAL TAXATION

Fall, 3 credit hour(s)

This course is designed to introduce students to the Internal Revenue Code, preparation of federal and state tax returns for individuals and small businesses. The course prepares students to participate in the IRS Volunteer Income Tax Assistance (VITA) program.

Prerequisites: MATH 106 and CITA 110, or permission of the instructor

ACCT 410 INTERNATIONAL ACCOUNTING

Fall/Spring, 3 credit hour(s)

International Accounting is the study of an entity reported as either a multinational company or an entity whose reporting obligations to stakeholders are located in a country other than that of the reporting entity. A detailed investigation on the convergence of U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) serves as a foundation for this course. Also discussed are the effects of financial reporting, international taxation, and international financial statement analysis on a multinational reporting entity.

Employing and critiquing the use of global accounting and auditing standards will integrate the student's existing skills with domestic accounting standards.

Prerequisites: ACCT 102, MATH 106 (or equivalent), ECON 101 or permission of instructor.

ACCT 430 AUDITING

Fall/Spring, 3 credit hour(s)

This course is designed to expose the student to the vocabulary, concepts, principles, and techniques of auditing. Emphasis is placed on the use of Generally Accepted Auditing Standards and their practical application to professional standards, ethics, internal controls, legal liability, audit planning, audit evidence, audit sampling, and the production of standard reports.

Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

ACCT 440 ADVANCED ACCOUNTING

Fall, 3 credit hour(s)

This course completes the financial accounting sequence as learned in Intermediate Accounting. Advanced accounting issues address: consolidations, mergers and acquisitions, governmental and non-profit organizations, foreign currency transactions, and partnerships.

Prerequisites: ACCT 300 or permission of instructor.

Course Descriptions: Air Conditioning, Agribusiness Mgmt.

ACHP 105 **HVAC SYSTEMS DESIGN** *Spring, 2 credit hour(s)*

The HVAC system and its component parts is studied in detail. Components are sized and selected to meet application requirements and then system equilibrium is determined.

ACHP 201 **BUILDING CONTROLS** *Spring, 3 credit hour(s)*

Introduction to building automation systems and building controls, with an emphasis on HVAC. It covers wiring sensors and actuators to controllers and programming the controllers.

ACHP 243 **AIR CONDITIONING I** *Fall, 3 credit hour(s)*

The properties of air and water vapor mixtures are determined by calculation and by the use of psychrometric charts. Air conditioning processes are studied leading to selection of systems. Cooling and refrigeration loads are calculated for commercial and residential structures. The performance of air conditioning systems and the use of instruments is covered in the laboratory.

Prerequisites: HVAC 101/102

ACHP 253 **DOMESTIC & COMMERCIAL HEATING I** *Fall, 4 credit hour(s)*

A study of basic theory, including the technical considerations which enter into the design of a heating system. Particular emphasis is given to warm air heating systems, selection of furnaces, air diffusers and duct sizing. Includes study of steam and hot water heating equipment, radiators, convectors, baseboard heating units and fan coil units.

Prerequisites: HVAC 101/102 or permission of instructor

ACHP 254 **DOMESTIC & COMMERCIAL HEATING II** *Spring, 4 credit hour(s)*

This course is a continuation of ACHP 253 focusing on steam boiler selection, design and layout, selection of equipment and pipe sizing. Particular emphasis is given to commercial systems such as fans and pumps. The student will design and layout of control systems based zone and occupant levels. Laboratory covers modern methods of testing heating equipment and systems.

Prerequisites: ACHP 253 or permission of instructor

ACHP 264 **AIR CONDITIONING SYSTEMS DESIGN** *Spring, 1 credit hour(s)*

Air conditioning systems are designed for specific buildings, equipment selected, working drawings made and specifications written.

Prerequisites: ACHP 243, ACHP 253, SOET 250 or permission of instructor

ACHP 306 **ENERGY SYSTEMS TECHNOLOGY** *Fall/Spring, 3 credit hour(s)*

The student will develop skills utilized in HVAC systems design, from the basic principles of heat transfer through detailed sizing and selection of various HVAC systems.

Prerequisites: Junior level status

ACHP 323 **HVAC EQUIPMENT SELECTION** *Fall/Spring/Summer, 3 credit hour(s)*

This course will cover the selection and layout of modern HVAC equipment for commercial buildings. Special concern applied to ASHRAE standards, codes and cost analysis. Three hours of lecture per week. Pre-requisites: Domestic and Commercial Heating II (ACHP 254) or permission of instructor.

Prerequisites: ACHP 254, or permission of instructor

ACHP 324 **HVAC LOAD CALCULATION** *Fall/Spring, 3 credit hour(s)*

This course instructs the student to the principles and methods of calculating the heating and cooling load of an HVAC system for residential and commercial buildings. The student learns how to design the HVAC systems following the codes and standards of ASHRAE publications. Energy efficiency and conservation are incorporated into the system design for optimal performance. The course is emphasized on computer-based calculations. Computer-assisted calculation and practice are carried out throughout the course. Three hours of lecture per week.

Pre-requisite: Refrigeration I (ACHP 101). Co-requisites: Thermodynamics (MECH 342) and Heat Transfer (MECH 343).

Prerequisites: ACHP 101; Co-requisites: MECH 342, MECH 343, or permission of instructor

ACHP 401 **BUILDING AUTOMATION SYSTEMS** *Fall, 3 credit hour(s)*

This course presents detailed study of building automation controls as applied in our modern facilities. Integration of building environmental control along with life safety, security, and maintenance functions are studied. The various proprietary protocol, as well as BACNET are presented. Digital and analog inputs to central and remote processors which in turn control devices to maintain building environmental conditions, safety, and security will be studied. Networking topics studied in prerequisite courses will be integrated into the application of these automation systems. Students will work with software to operate these systems as well as specify equipment to meet the goals within the facility.

Prerequisites: CITA 200, ACHP 306 or ACHP 244, or permission from instructor.

ACHP 412 **ENERGY ANALYSIS AND AUDIT** *Fall/Spring, 3 credit hour(s)*

This course provides skills to perform an energy analysis of future commercial buildings and the audit of existing building through the study of energy standards and codes use in the United States. HVAC and architectural drawings are reviewed through case studies and actual buildings are audited providing students with the necessary skills to reduce energy cost in to the future of building development.

Prerequisites: Junior level status

ACHP 415 **COMMISSIONING OF MECHANICAL SYSTEMS** *Fall/Spring, 3 credit hour(s)*

This course explores the modern building practice of implementing a quality-oriented pro-

cess for achieving, verifying, and documenting the performance of facilities, systems and assemblies. Students develop and analyze the owner's project requirements and translate these requirements into a commissioning plan. Students will transform the commissioning plan into an operational and maintenance plan for the building owner and operators.

Prerequisites: ACHP 324 or permission of instructor

AGET 105 **AGRICULTURAL EQUIPMENT MAINTENANCE AND OPERATION** *Fall/Spring, 3 credit hour(s)*

An introduction to the maintenance of equipment utilized in agricultural applications such as farms, landscape businesses, tree services, and any business with outdoor equipment. Hybrid elective course where the lecture is delivered on-line and the lab is delivered at a remote locations such as agricultural equipment dealerships when the equipment is not located at SUNY Canton. 2-hour lecture, 3-hour lab

AGMT 100 **INTRO TO AGRIBUSINESS** *Fall, 3 credit hour(s)*

An introduction to the management, entrepreneurship, and other tools needed to solve practical problems in agribusiness. The course will help students place agribusiness management in perspective and develop an understanding of agribusiness organizations, the challenges they face, and how to measure their effectiveness. Particular emphasis will be placed on how to develop successful agribusiness ventures, including overall organization, human resource management, finance, and marketing.

AGMT 305 **AGRICULTURAL POLICY** *Fall, 3 credit hour(s)*

This course introduces students to the role of government and other institutions in setting agricultural and food policy. It develops an understanding of the application of economic theory to agricultural problems and the policy decision process. Topics such as macroeconomic policies, farm policies, rural development policies, agricultural trade policy, environmental policy, food safety and security policy, and food assistance and nutrition policy are discussed.

Prerequisites: ECON 101 and ECON 103 and a minimum 45 credit hours, or permission of instructor.

AGMT 310 **AGRIBUSINESS MANAGEMENT** *Spring, 3 credit hour(s)*

This course provides students with understanding of the size, scope and importance of the agribusiness food chain including agricultural producers, processors, distributors, farmers and ranchers. It examines marketing, financial, operations and human resource management principles applied to agribusiness firm. Topics such as organization of an agribusiness, economics for agribusiness managers, international agribusiness, financing agribusiness, evaluation of operating and investment decisions, production planning and management, and supply chain management for agribusiness are discussed.

Prerequisites: ECON 103, FSMA 210 and or permission of instructor - Co-requisite: BSAD 301

Course Descriptions: Agribusiness Mgmt., AMSL, Anthropology, AREA

AGMT 320 AGRICULTURAL MARKETS AND PRICE ANALYSIS

Fall, 3 credit hour(s)

This course introduces students to the agricultural price analysis, agricultural market structures and agricultural marketing strategies. It utilizes the economic concepts to help students understand and develop practical agribusiness marketing strategies. Topics such as agricultural price seasonality, market adjustments, price analysis using supply and demand, equilibrium displacement models, food marketing channel, international agricultural trade, and agricultural futures and options markets are discussed.

Prerequisites: Principles of Microeconomics (ECON 103), Marketing (BSAD 203) and MATH 141 Statistics, or permission of instructor.

AGMT 330 FARM BUSINESS MANAGEMENT

Spring, 3 credit hour(s)

This course provides students with tools needed to measure management performance and financial condition of the farm business. It develops decision-making skills in planning, organizing, directing, and controlling farm business. Topics such as farm record keeping, an accounting system, financial statement analysis, investment analysis, crop and livestock enterprise budgeting and analysis, risk management, income tax management are discussed.

Prerequisites: BSAD 100, ECON 103 and FSMA 210 or permission of instructor.

AGMT 385 AGRICULTURAL LAW

Spring, 3 credit hour(s)

This course examines areas of law applicable to agriculture, including agricultural law; acquisition and disposal of farmland; farm tenancies; rights and limitations in the use and ownership of farmland; water law; environmental protection; protection of the productivity of agricultural land; and the law of sales and secured transactions in an agricultural context. Critical legal issues facing the industry and consumers will be discussed, including federal farm programs, the structure of farms and industrialized agriculture, migrant labor issues, farm animal welfare, as well as agriculture commercial law.

Prerequisites: Business Law I (BSAD 201) or permission of instructor.

AGMT 410 AGRIBUSINESS MANAGEMENT INTERNSHIP

Spring, 6-12 credit hour(s)

The Agribusiness Management Internship integrates classroom work and practical experience with cooperating businesses or agencies. The Internship allows seniors the opportunity to apply classroom learning in an agricultural management setting. It is a structured field experience in which an Intern, under the guidance of a supervisor, acquires and applies knowledge and skills while working in a responsible role. The internship site and completed documentation must be completed by the student and turned into the supervising faculty by the end of the semester prior to the start of the internship. Internship assignments and activities may include, but not be limited to, information gathering, research, drafting of documents, office management, and other tasks and responsibilities deemed necessary.

Prerequisites: Senior status in the Agribusiness

Management program. Student must have a GPA of 3.0 or higher before the internship begins, or permission of the instructor in consultation with the student's academic advisor.

AGMT 450 AGRIBUSINESS MANAGEMENT CAPSTONE

Spring, 3 credit hour(s)

This multidisciplinary capstone course integrates materials from Agribusiness Management courses to allow students to gain practical skills and knowledge of the varied fields of Agribusiness and the role agribusiness managers have within the multiple systems. Students analyze and evaluate advanced Agribusiness issues, i.e. impact from evolving Federal and State laws relating to Agribusiness facilities, providers, and consumers. Students also study contemporary challenges by incorporating knowledge gained through Agribusiness courses and required readings.

Prerequisites: 90 credits earned, in Agribusiness Management; or permission of instructor.

AMSL 101 INTRODUCTION TO AMERICAN SIGN LANGUAGE

Fall, 4 credit hour(s)

American Sign Language (ASL) is the third most frequently used language in the United States after English and Spanish. This course introduces students to ASL: the visual-gestural language of the deaf. It incorporates non-verbal communication techniques: fingerspelling, basic vocabulary, grammar and syntax, and conversational skills. In addition, students gain an understanding of the deaf community, its history, culture, and the issues that impact the deaf community in the 21st century.

ANTH 101 INTRO TO PHYSICAL ANTHROPOLOGY & ARCHEOLOGY

Fall/Spring, 3 credit hour(s)

This course provides an overview of the theory of evolution, comparative analysis of primates, natural selection, the genetic basis of variation, the fossil record leading to and including human evolution, and a look toward the future of our species.

Fundamental methods and theories in archaeology will also be covered.

ANTH 102 INTRODUCTION TO CULTURAL ANTHROPOLOGY

Fall/Spring, 3 credit hour(s), GER 7 & GER 10

In this course, students will be introduced to the core concepts and methodologies of cultural anthropology. Cultural anthropology is an academic discipline that seeks to understand human cultural diversity, the reasons for that diversity, and its implications for peoples' social and economic life. It uses research methodologies that seek to find out how people understand themselves, others, and appropriate ways of living in the world. The course will also explore classic themes and issues in the anthropological study of cultural and social issues, and arrangements both in the United States and around the world.

AREA 110 INTRODUCTION TO ALTERNATIVE ENERGY

Fall, 3 credit hour(s)

Students will discuss the usefulness of various

types of energies as they relate to the future of this planet. Topics will include passive and active solar systems, fuel cells, hydroelectric power, geothermal heat transfer, and wind energy.

AREA 210 SUSTAINABLE BUILDING

Spring, 3 credit hour(s)

This course is an introduction to building science. Basic topics are introduced such as air leakage, heating, cooling, and insulation. Students will also see different types of building construction and how they relate to building science.

AREA 300 FUEL CELLS

Fall/Spring, 3 credit hour(s)

Students will discover the science involved in the operation of fuel cells and technical applications of a fuel cell in providing electricity and heat. Topics explored are hydrogen as a fuel, energy efficiency, and operational characteristics of a fuel cell. In depth studies of proton exchange membrane, alkaline electrolyte fuel cells, and direct methanol fuel cells will teach students about the conversion of hydrogen fuel to useable forms of energy.

Prerequisites: CHEM 150, College Chemistry I

AREA 303 WIND TURBINES

Fall/Spring, 3 credit hour(s)

This course is an introduction to issues related to the production of electricity from wind power. The study of the atmospheric science necessary to locate wind turbines for the production of electricity will teach students how to interpret data. In addition, the study of design and control will allow for a comprehensive knowledge of all sub-components of a wind turbine. A complete analysis of all the technology utilized in the production of electricity will assist students in knowing the details involved in sizing and siting of wind turbines.

Prerequisites: ELEC 261 and ELEC 215 or permission of instructor.

AREA 320 EXPERIMENTATION & MEASUREMENT I

Fall, 3 credit hour(s)

In this laboratory students will learn experimental methods, instrumentation for engineering measurements, statistical estimates of experimental uncertainty, and calibration techniques. Students will perform laboratory experiments that are applicable to energy systems as well as to broader engineering applications. This course serves as the foundation for higher level lab and design courses in this curriculum.

Prerequisites: SOET 110, MATH 150, PHYS 104, MECH 241, ENGS 102 or permission of instructor.

AREA 321 SOLAR ENERGY UTILIZATION

Fall, 3 credit hour(s)

Solar Energy Utilization is an introductory course on solar energy with an emphasis on thermal processes. Topics include solar radiation, heat transfer, flat-plate collectors, thermal energy storage, and solar thermal applications.

Prerequisites: MECH 225 or permission of instructor.

Course Descriptions: Alt. and Renewable Energy Systems, Arts, Astronomy

AREA 323 PHOTOVOLTAIC SYSTEMS *Fall/Spring, 3 credit hour(s)*

Photovoltaic Systems examines the direct conversion of solar energy to electricity. Topics include photovoltaic (PV) cell physics, types of PV cells, PV system components, and PV energy storage.

Prerequisites: MECH 225

AREA 324 SUSTAINABLE CONSTRUCTION *Fall, 3 credit hour(s)*

This course is an introduction to sustainable building design. It focuses on the application of building science to the design and construction of durable and functional buildings that optimize the balance between operating costs, construction costs, and life-cycle carbon footprint

Prerequisites: Junior Level Status or permission of instructor

AREA 340 GEOTHERMAL ENERGY *Fall/Spring, 3 credit hour(s)*

Applications of thermodynamics and heat transfer principles will explain how energy is transformed from geothermal energy to useable energy for large and small scale systems. Students will determine heating and cooling loads leading to the selection of the correct system installation to meet the demand. Correct system sizing and installation procedures will be explored along with the environmental issues related to geothermal energy production.

Prerequisites: AREA 110 or ENGS 101

AREA 370 EXPERIMENTATION & MEASUREMENT II *Spring, 3 credit hour(s)*

In this laboratory course students will perform engineering measurements to acceptable standards. They will also choose the method of measurement to achieve the accuracy necessary for use in alternative energy experiments. A hands-on approach will furnish practical knowledge of the operation of various alternative energy devices and diagnostic tools. The labs will reflect topics discussed in the AREA electives.

Prerequisites: AREA 320

AREA 424 SUSTAINABLE BUILDING RATINGS AND CERTIFICATIONS *Fall, 3 credit hour(s)*

This course explores popular sustainable building rating and certification systems comparing their requirements, pros, and cons. The vitality and viability of these systems will be analyzed, compared, and discussed. Students will work as a group to perform a conceptual implementation and documentation of one of the rating systems. Examples of these ratings or certification systems include Energy Star, LEED, Green Globes, Living Building Challenge, Net Zero Energy, and Passive House Institute US.

Prerequisites: AREA 324/CMGT 324

ARTS 101 INTRODUCTORY DRAWING *Fall/Spring, 3 credit hour(s), GER 8*

This course is an introduction to the fundamental principles and processes of drawing. Students will begin to develop a facility for the creative process and aesthetic expression. We will work from still-life, nature, the model and the imagination.

Specific problems will be assigned to explore various drawing media, promote an understanding of pictorial structure, and cultivate good compositional judgement.

ARTS 201 ART HISTORY: BC TO 16TH CENTURY *Fall, 3 credit hour(s), GER 7 and GER 8*

This course is a study of the history of art from cave Art to the Renaissance. Emphasis will be placed on the development of the art and architecture and its relationship to the cultural, political, social, and religious climate in which it was produced.

ARTS 202 ART HISTORY: 16TH TO 20TH CENTURY *Spring, 3 credit hour(s), GER 7 and GER 8*

This course is a study of the history of art from the Renaissance to modern times. Emphasis will be placed on the development of the art and its relationship to the cultural, political, and social climate of the time in which it was produced.

Three hours lecture per week.

ARTS 203 ART AND SOCIETY *Fall/Spring/Winter/Summer, 3 credit hour(s), GER 8*

Art and Society explores the development of the Fine Arts and its relationship to social, political, and economic structures of both contemporary and historical cultures. Through the research, discussion, and presentation of several case studies in historical and contemporary art practices, students will develop their critical awareness of interdisciplinary relationships in present and past cultures. This course explores the artistic practice and production of several cultural epochs as both a symptom and parameter of social-political trends/events. Students will develop their understanding of significant contemporary and historical issues and explore their bearing and relationship to the Fine Arts.

Prerequisites: ENGL 101 or permission of instructor.

ARTS 204 INTRODUCTION TO PAINTING *Fall/Spring, 3 credit hour(s), GER 8*

Students practice basic approaches to watercolor, acrylic and oils, applying these techniques towards more accomplished works. Class work includes exercises, studies, and analysis of professional works. Students will develop ability to apply compositional terms and concepts in analysis of paintings. At the conclusion of the course students will develop a portfolio of completed works.

ARTS 206 DIGITAL ART HISTORY *Fall/Spring, 3 credit hour(s)*

Have you ever wondered what Egyptian hieroglyphics would look like in time-based media? Or how power and class in the Roman empire would be expressed in the digital age? What does Venus of Willendorf tell us about the prehistoric idea of the feminine, and how would this play out today on social media expressed as an emoji? Today's technology lets us take a journey through several millennia of human creative development. In this course, students will recontextualize the art and artifacts of past cultures using contemporary digital tools. Following several case studies about the artwork from different paradigms across human history, students will analyze the role that complex networks

of social structures and systems play in the creation of dynamics of power, privilege, oppression, and opportunity. In addition to critical analysis, students will use digital drawing, animation, and 3-D modeling as investigative tools to research the artistic development of past cultures and what they tell us about the societal factors that shape the development of individual and group identities, specially focusing on race, gender and class.

Prerequisites: ENGL 101

ARTS 301 DIGITAL STORYBOARDING *Fall/Spring, 3 credit hour(s)*

This course sequentially builds on the skills, techniques, and concepts introduced in ARTS 101 and GMMD 201. Through research, demonstrations and studio-based assignments, students develop skills in conceptual schematics, sequential storyboarding, and digital illustration using industry current digital design software and digital tablets. The student projects culminate in a portfolio of digital works.

Prerequisites: ARTS 101 and GMMD 102 or GMMD 103

ARTS 305 CHARACTER AND ENVIRONMENTAL DRAWING *Fall/Spring, 3 credit hour(s)*

This course builds on the techniques of observational drawing in ARTS 101 with a focus on drawing from the imagination. Emphasis is placed on characterization (development, emotional expression, costume and drapery), movement and motion, and environmental interactions.

Prerequisites: ARTS 101

ASTR 101 ASTRONOMY OF THE SOLAR SYSTEM *Fall, 3 credit hour(s), GER 2*

This course is an introduction to the science of astronomy and is a study of our immediate neighborhood in the universe, the solar system. Topics included are the appearance of the sky, the earth as a planet, light, telescopes and their applications, the physical nature of the planets, the motion and surface of the moon, lesser bodies in the solar system, origin and evolution of the solar system, and the possibilities for extraterrestrial life.

Prerequisites: high school algebra or equivalent

ASTR 102 ASTRONOMY OF SOLAR SYSTEM LAB *Fall, 1 credit hour(s)*

This course is an introduction to the science of astronomy and is a study of our immediate neighborhood in the universe, the solar system. Topics included are the appearance of the sky, the earth as a planet, light, telescopes and their applications, the physics nature of the planets, the motion and surface of the moon, lesser bodies in the solar system, evolution of the solar system and the possibilities for extraterrestrial life. Three hours lecture per week. If lab is elected, an additional two hours laboratory per week is required.

Prerequisites: high school algebra or equivalent

ASTR 103 STELLAR ASTRONOMY *Spring, 3 credit hour(s), GER 2*

This is a survey course examining the structure, evolution and classification of stars. Topics covered

Course Descriptions: Astronomy, Automotive

will include the history of astronomy, the sun, classification of stars, multiple star systems, birth and death of stars, gravitational collapse, pulsars, black holes, galaxies, quasars, special theory of relativity, and cosmology. An observation project is also required. Three hours lecture per week. If lab is elected, an additional two hours laboratory per week is required. Recommended prerequisite: high school algebra or equivalent.

Prerequisites: high school algebra or equivalent

ASTR 104 STELLAR ASTRONOMY LAB

Spring, 1 credit hour(s)

This is a laboratory course to accompany ASTR 103 – Stellar Astronomy. Laboratory exercises will both explore fundamental concepts and physical principles introduced in lecture such as the properties of light in the Introduction to Spectroscopy Lab, as well as give the students a feel for the work of a modern Astronomer with computer based simulation exercises.

Prerequisites: high school algebra or equivalent

AUTO 101 AUTOMOTIVE SERVICES

Fall, 2 credit hour(s)

Automotive Services is an introductory course in vehicle systems theory of operation and maintenance. Topics include automotive shop procedures involved in general maintenance of vehicles related to suspension, engine, and driveline. Safety and customer relations skills will also be stressed. Students who have successfully completed a high school vocational program in Automotive Mechanics/Technology may be eligible for transfer credit. Two hours lecture per week.

Prerequisites: None. Co-requisite:

AUTO 111 AUTO 102 DIESEL ENGINES

Spring, 2 credit hour(s)

A course which considers the basic construction of the diesel engine. Topics will include classification of diesel engines, fuels, turbochargers, injection systems, and pre-heater systems. Laboratory will consist of hands-on experience in engine troubleshooting, parts identification, adjustments and testing.

Prerequisites: AUTO 112 and AUTO 101 or MSPT 101

AUTO 103 AUTOMOTIVE AIR CONDITIONING

Spring, 2 credit hour(s)

A study of the component parts of automotive air conditioning systems, their function and operation. Laboratory will consist of hands-on experience in testing, evacuation, and charging of the system. Refrigerant identification, safety, and environmental issues are addressed, along with fundamentals of manual and automatic controls. One hour lecture, two hours laboratory per week.

Prerequisites: AUTO 112 and AUTO 122, or permission of instructor.

AUTO 104 BASIC WELDING

Fall, 1 credit hour(s)

This course in welding will include all basic processes and procedure in joining and cutting ferrous and nonferrous metals found in automotive/industrial applications. Focus will include safety, proper techniques and quality control.

Corequisite: AUTO 101 Automotive Services

AUTO 111 AUTOMOTIVE SERVICES LABORATORY

Fall, 1 credit hour(s)

Topics include automotive shop procedures involved in general maintenance of vehicles related to suspension, engine, and driveline. Additional information addresses New York State inspection. Students who have successfully completed a high school vocational program in Automotive Mechanics/Technology may be eligible for transfer credit. Two hours laboratory per week.

Prerequisites: None. Co-requisite: AUTO 101 or permission of instructor.

AUTO 112 AUTOMOTIVE ELECTRICAL SYSTEMS

Fall, 3 credit hour(s)

This course is a study of fundamental electrical circuits and relative theory as applied to the automobile. Series, parallel, series-parallel circuits, magnetism, direct and alternating current fundamentals, charging systems, starters, lighting systems, and basic electronics are studied.

Prerequisites: AUTO 122

AUTO 113 ENGINE PERFORMANCE I

Spring, 3 credit hour(s)

With the completion of this course, the student will be able to diagnose a performance condition resulting from an engine mechanical, fuel or ignition problem. Students will analyze engine mechanical condition, such as cylinder compression, cylinder leakage, and valve timing issues. In the engine ignition and fuel delivery systems, students will diagnose using electronic computer based scanners, digital multimeters, oscilloscopes and other diagnostic devices.

Prerequisites: AUTO 112 and AUTO 101 or MSPT 101. Co-requisite: AUTO 114

AUTO 114 ENGINE PERFORMANCE I LAB

Spring, 1 credit hour(s)

The laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, while testing systems with digital volt/ohm meters and computer scanners. Fuel and powertrain control systems are diagnosed with the latest tools available. With the completion of both components of Engine Performance 1, (AUTO 113 and AUTO 114) students will be able to diagnose and repair a vehicle with a no-start condition resulting from a fuel or ignition problem. The student will be able to access vehicle computer information, including inputs, outputs, and miscellaneous tests.

Prerequisites: AUTO 112 and AUTO 101 or MSPT 101. Co-requisite: AUTO 113

AUTO 122 AUTOMOTIVE ELECTRICAL SYSTEMS LAB

Fall, 1 credit hour(s)

The laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, both hard-copy and electronic. Testing involves batteries; series, parallel, and series-parallel circuits, as well as charging and starting systems component identification and service.

Prerequisites: None. Co-requisite: AUTO 112

AUTO 141 AUTOMOTIVE BRAKING SYSTEMS

Spring, 3 credit hour(s)

This course consists of theory and operation of automotive brake systems. Topics covered include: foundation brake components of disc and drum brake systems, hydraulic brake system components, and brake enhancements including antilock brake system and stability control.

Prerequisites: AUTO 112 and AUTO 101 or MSPT 101. Co-requisite: AUTO 144

AUTO 144 AUTOMOTIVE BRAKING SYSTEMS LAB

Spring, 1 credit hour(s)

This course is designed to teach entry level skills in the repair, replacement, and service of automotive brake systems. Brake service areas covered include disc brake, drum brake, parking brake, brake hydraulic system, and brake component measuring tolerance. Services include, resurfacing rotors and drums, flaring hydraulic line.

Prerequisites: AUTO 112 and AUTO 101 or MSPT 101. Co-requisite: AUTO 141

AUTO 212 AUTOMOTIVE ELECTRICAL SYSTEMS II

Spring, 4 credit hour(s)

This course begins where Automotive Electrical Systems terminates. Topics covered include lighting, gauges, warning devices, driver information systems, horn and wiper operations, and electrical accessory diagnosis and repair.

Prerequisites: AUTO 112. Co-requisites: AUTO 214

AUTO 213 ENGINE PERFORMANCE II

Fall, 4 credit hour(s)

This course begins where Engine Performance I terminates. Sophisticated engine control systems are studied which include Variable Valve Timing and Lift, Boost, and Emissions Controls. The student learns and applies knowledge of the integration of the above systems and powertrain/engine control computer (PCM). Diagnosis and repair include test equipment such as digital volt-ohm meters, oscilloscopes, and interactive computer scanners. Students continually utilize the latest automotive reference materials in diagnosis and repair procedures.

Prerequisites: AUTO 112, AUTO 122, AUTO 113, and AUTO 114

AUTO 214 AUTOMOTIVE COMPUTER SYSTEMS

Spring, 3 credit hour(s)

Review of electrical and electronic devices used in automobiles. Study of on-board diagnostic systems for both domestic and import vehicles. Diagnosis of computerized automotive systems. A writing intensive course.

Prerequisites: AUTO 111, AUTO 213. Co-requisites: AUTO 212

AUTO 218 AUTOMOTIVE ENGINE REPAIR

Fall, 3 credit hour(s)

This course provides instruction regarding the operation of the gasoline internal combustion engine. Instruction will build on the basic engine construction and operation learned in Automotive Service and Engine Performance I with an understanding of the effects of dynamics and engine

Course Descriptions: Automotive, Biology

operation on fluids, metals, combustion, and heat transfer. Students perform repair and maintenance procedures on the various systems and components of automotive engines.

Prerequisites: AUTO 113, AUTO 114, ENGL 101, MATH 101 or higher

AUTO 221 AUTOMATIC TRANSMISSIONS

Spring, 4 credit hour(s)

Students study fundamental principles of automatic transmissions. Topics include torque converters, planetary gearsets and hydraulics. Various powerflows are compared using specific transmissions as examples.

Prerequisites: AUTO 113, AUTO 114, AUTO 141, and AUTO 144

AUTO 225 DRIVELINES & MANUAL TRANSMISSIONS

Fall, 3 credit hour(s)

Topics include transmission theory, design, and, operation of manually shifted front-wheel and rear-wheel drive transmissions in automotive applications. Related topics necessary to include with transmissions also include axles, drive shafts, differentials, universal joints, transfer cases, and the manual and electronic controls associated with each. Students receive equal lecture and lab sessions.

Prerequisites: AUTO 112, AUTO 113, AUTO 114, AUTO 122, AUTO 141, AUTO 144, AUTO 213 or permission of instructor.

AUTO 230 SERVICE MANAGEMENT AND OPERATIONS

Spring, 1 credit hour(s)

This seminar type course will meet to discuss topics such as satisfaction, shop management, management techniques, equipment purchase/utilization and dealership structure. Students will perform interviews and write about their findings. Each student will write five research papers from a list of topics concerning the automotive repair business. Weekly summaries from trade journals will be completed. These will relate to topics in Automotive Service Management.

Prerequisites: AUTO 213

AUTO 240 HYBRID AND ELECTRIC VEHICLES

Fall, 3 credit hour(s)

This course covers the details and diagnosis of the powertrain of hybrid vehicles that are electric and internal combustion engine propelled as well as vehicles that are electric propulsion only. The internal combustion engine is not covered in this course.

Coverage in this course includes safety, tools, scan tools, types, and diagnostic procedures primarily focusing on the electric portion of vehicle drivetrains.

Prerequisites: AUTO 113, AUTO 114, AUTO 141, AUTO 144 or ASE Certification with 4 years of automotive experience, or permission of instructor.

AUTO 241 SUSPENSION DESIGN AND SERVICE

Fall, 2 credit hour(s)

This course covers the theory of, diagnostic and service procedures used in suspension and steering systems.

Prerequisites: AUTO 111 and AUTO 101 or MSPT 101. Co-requisite: AUTO 282

AUTO 253 SUBARU UNIVERSITY TRAINING

Spring, 1 credit hour(s)

Students who earned their way into Subaru-U by earning a grade of B or higher GPA and have an interest in employment at a Subaru dealership upon graduation, take on-line courses from Subaru to begin with. Subaru-U training Level 1 is non-manufacturer specific and reinforces SUNY Canton Automotive training at the 100 level. Subaru-U training Level 2 is specific to Subaru yet still reinforces SUNY Canton Automotive training at the 200 level. Level 1 and 2 are the prerequisites to Level 3 face-to-face training at Subaru training centers.

Prerequisites: AUTO 101, 111, 112, 122

AUTO 282 SUSPENSION DESIGN AND SERVICES LABORATORY

Fall, 1 credit hour(s)

This course covers diagnostic, repair, and adjustment procedures used in suspension and steering systems. Proper use of suspension and steering tools and equipment is covered, including computerized alignment equipment.

Prerequisites: AUTO 101 and AUTO 111 or MSPT 101. Co-requisite: AUTO 241

BIOL 101 INTRO TO BIOLOGY

Fall/Spring, 4 credit hour(s), GER 2

A study of the major concepts in the life sciences presented for the non-major. The concepts of cell theory, cellular organization and function, inheritance, and evolution will be covered with the laboratory portion of the course designed to elaborate on these concepts. Two hours lecture, two hours laboratory per week. Conditions: For students scoring less than 75 on the NYS Biology Regents exam or who did not take HS biology OR permission of instructor. Cannot be taken for credit by students with credit in Introduction to Human Biology (BIOL 102).

BIOL 117 HUMAN REPRODUCTION

Spring, 3 credit hour(s), GER 2

This course will discuss human reproduction from a biological point of view. Topics of interest will include anatomy, reproductive physiology, genetics, conception, embryology, pregnancy and parturition, and disease states. Consideration will be given to medical, psychological, sociological, and legal and ethical perspectives.

BIOL 150 COLLEGE BIOLOGY I

Fall, 4 credit hour(s), GER 2

An introduction to the fundamental biological concepts common to plants, animals, and microorganisms. Topics include the chemical and molecular basis of life, metabolism, cell biology, cellular reproduction, Mendelian and molecular genetics, gene regulation, DNA technology, and evolution. The laboratory includes the study of cells, osmosis, enzymes, cellular respiration, genetics, molecular techniques, and the dissection of a representative mammal.

Prerequisites: New York State Regents Biology examination grade of 75 or above or BIOL 101 or BIOL 102; AND HS chemistry or CHEM 101/100 or CHEM 107/108; or permission of instructor.

BIOL 155 COLLEGE BIOLOGY II

Spring, 4 credit hour(s)

This course consists of the study of the evolutionary history of biological diversity, plant form and function, animal development, and aspects of animal form and function including the immune system, nervous systems, homeostasis and chemical signals. The laboratory includes structural and functional studies of representative plants and animals, bacterial transformation, photosynthesis, plant growth and development, animal tissues, and population dynamics.

Prerequisites: BIOL 105 or permission of instructor.

BIOL 207 HUMAN ANATOMY

Spring, 4 credit hour(s)

This course is a detailed study of the human body with the emphasis on structure and general function. Included topics are cells, tissues, skeletal, muscular, digestive, circulatory, respiratory, reproductive, urinary, nervous, endocrine systems and sense organs. This course is most suitable for students in health-related, biology, or Mortuary Science curriculums requiring in-depth knowledge of the human body.

Prerequisites: New York State Regents Biology examination score of 75 or above or BIOL 101, BIOL 102, BIOL 150 or permission of instructor.

BIOL 209 MICROBIOLOGY

Fall/Spring, 4 credit hour(s)

A study of the basic characteristics of microbes, with an emphasis on disease causing organisms. Includes morphology, growth, physiology, and control.

Laboratory techniques including microscopy, staining, aseptic technique, culture media, isolation, and identification of microbes. Three hours lecture, two hours laboratory per week. Prerequisite: Introduction to Biology (BIOL 101) or Introduction to Human Biology (BIOL 102) or College Biology I (BIOL 105) or Human Anatomy & Physiology I (BIOL 217) or permission of instructor.

Prerequisites: BIOL 101, BIOL 102, BIOL 105 or BIOL 217; AND HS chemistry or CHEM 101/100 or CHEM 107/108; or permission of instructor.

BIOL 217 HUMAN ANATOMY & PHYSIOLOGY I

Fall/Spring, 4 credit hour(s), GER 2

This course is the first course in a sequence which studies the anatomy and physiology of the human body in detail. Topics covered in this first semester course include an introduction to the basic plan and organization of the body, basic biochemistry, basic cell structure and cell physiology and the anatomy and physiology of the integumentary, skeletal, muscular, nervous and endocrine systems. The laboratory sessions will explore detailed anatomy using models and specimens, and experimental physiological concepts. This course is appropriate for students in the nursing, physical therapy assistant, occupational therapy assistant and other health-related fields that require a two semester Anatomy and Physiology sequence.

Prerequisites: High School Biology Regents score of 75 or above, BIOL 101 or BIOL 102 and High School Chemistry Regents score of 65 or above or CHEM 101 or CHEM 107/108; or permission of instructor.

Course Descriptions: Biology, Business/Management

BIOL 218 **HUMAN ANATOMY & PHYSIOLOGY II** *Fall/Spring, 4 credit hour(s)*

This is the second in a sequence of two courses that studies the detailed anatomy and physiology of the human body. Topics include the anatomy and physiology of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Also the subjects of the immune system, metabolism, fluid- electrolyte-acid-base balance, and pregnancy and development will be covered. The laboratory will include a dissection of the cat.

Prerequisites: BIOL 217 or equivalent or permission of instructor.

BIOL 310 **THE HUMAN GENOME** *Fall/Spring, 3 credit hour(s)*

This course covers the fundamental concepts of molecular genetics and heredity, as well as mutations, the genetics of sex and gender, the human genome, complex traits, genetic testing, gene therapy, and the near future of genetics. Besides providing a basis for understanding the current state of genetic knowledge, future discoveries, and novel applications, a major focus of the course is developing the sophistication necessary to sort out myths and misconceptions about heredity.

Prerequisites: BIOL 150 or BIOL 217

BIOL 315 **INTRODUCTION TO IMMUNOLOGY** *Fall/Spring, GER 5, credit hour(s)*

This course will investigate basic concepts of immunology including innate and adaptive immunity, antigens, immunoglobulins, the major histocompatibility complex, cytokines, complement system, vaccines, and immune dysfunction. The course will culminate in a literature review on a current topic in immunology research.

Prerequisites: BIOL 150 or BIOL 209 or BIOL 217 or VSCT 210 or permission of instructor.

BIOL 325 **BIOLOGY IN SOCIETY** *Spring, 3 credit hour(s)*

This course is designed to develop critical thinking concerning the growing presence of biology in society. Students apply biological principles and the scientific method to problems and decisions confronting society. Students use and expand upon their basic biological knowledge of DNA, molecular biology and physiology to discuss the importance and ethical impact of the use of biology in society. General topics will include DNA technology, stem cells, GMOs, and medical and forensic applications. Specific topics discussed may vary from one semester to the next as new issues or developments warrant. The central goal of the course is to have students leave as highly informed citizens with a greater understanding of the science behind current biological applications. Three lecture hours per week.

Prerequisites: A grade of C or higher for one of the following courses or its equivalent: BIOL 101, BIOL 102, BIOL 105, BIOL 217/218, or permission of instructor.

BIOL 335 **PATHOPHYSIOLOGY** *Fall, 3 credit hour(s)*

This course focuses on the central concepts of cellular and tissue pathophysiology. A systematic

survey is undertaken of genetic diseases, cancer, and the diseases of the immune, nervous, endocrine, hematologic, cardiovascular, lymphatic, pulmonary, renal, reproductive, digestive, musculoskeletal and integumentary systems. The etiology, pathophysiology, and clinical manifestations of diseases are discussed.

Prerequisites: BIOL 209, BIOL 218, VSCT 144

BSAD 100 **INTRODUCTION TO BUSINESS** *Fall/Spring, 3 credit hour(s)*

This course is a survey of business, introducing the major operations of a business, including production, marketing, finance, and human resources management. The course also examines the economic, social, and political environment of business. This course will expose students to speakers from varying business disciplines throughout the semester. Students should anticipate devoting at least 9 hours per week on class material and preparation.

BSAD 111 **INTRODUCTION TO PERSONAL FINANCE** *Fall, 3 credit hour(s)*

Students learn about financial decision making, setting personal financial goals, income and careers (the money you earn), savings, investing, retirement planning (the money you keep), and principles of money management (the money you spend).

BSAD 120 **PRINCIPLES OF BANKING** *Spring, 3 credit hour(s)*

This course is an in depth introduction to the diversified services offered by the banking industry today, especially banking role in money creation and in the distribution of funds. Attention is paid to banking history, currency, deposits, negotiable instruments, loans, mortgages, security, and fraud.

BSAD 200 **BUSINESS COMMUNICATIONS** *Fall/Spring, 3 credit hour(s)*

This course is designed to help develop strong oral and written communication skills. The student will be given opportunities to practice writing and editing professional correspondence. Additionally, the student will compose and deliver oral presentations. Assignments will include the use of inductive and deductive approaches to conveying a variety of messages and applying the rules for proper grammar and punctuation.

BSAD 201 **BUSINESS LAW I** *Fall/Spring, 3 credit hour(s)*

Test and case study of the American court system as well as the origin, nature, and classification of law with emphasis on general contract law and the impact of negligence, and criminal law on business.

BSAD 202 **BUSINESS LAW II** *Fall/Spring, 3 credit hour(s)*

Continuation of Business Law I. Areas of study include Bankruptcy and Reorganization, Labor Law, Administrative Law, Bailment and Agency.

Prerequisites: BSAD 201

BSAD 203 **MARKETING** *Fall/Spring, 3 credit hour(s)*

This course provides students with an introduction to marketing as a functional area of business. Students build an understanding of the marketing mix (price, product, promotion, and placement) and its role in contributing to successful business operations. Students explore the impact of legal, political, social, ethical, technological, economic, and competitive factors on marketing activities.

Prerequisites: ACCT 101, or BSAD 100, or ESPT 100, or HSMB 101, or permission of instructor.

BSAD 204 **INTRODUCTION TO BUSINESS STATISTICS** *Fall, 3 credit hour(s)*

In this course, the students are introduced to the subject of business statistics to include the need for quantitative analysis in business, the basic procedures in problem solving, and the sources and types of data used by business firms using business application software. Basic probability concepts and normal probability distribution are used by the student to solve real world business problems which involve business applications.

Prerequisites: MATH 141 and CITA 110, and ACCT 101 or ECON 103, or permission of instructor.

BSAD 206 **INTRODUCTION TO THE HOSPITALITY MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course introduces students to the hospitality industry, providing a general overview of trends and issues in key industry segments such as lodging, foodservice, tourism, recreation, and attractions, and MEEC (meetings, events, exhibitions, and conventions). The course also examines career and educational opportunities in the hospitality industry and provides a foundation for higher-level hospitality courses.

BSAD 207 **PUBLIC ADMINISTRATION** *Fall/Spring, 3 credit hour(s)*

This course is designed to provide students with an introduction to the field of public administration, including its practice, contemporary challenges and future trends. Public administration includes activities taken directly by government, or in partnership with others, to meet the democratically expressed needs of the public. These activities include policy design, implementation, evaluation of outcomes, and re-design or re-direction.

Prerequisites: BSAD 100 or HSMB 101

BSAD 215 **SMALL BUSINESS MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course will examine the nature of small business and the people who are successful in starting them. Topics will include the requirements and steps of conducting a comprehensive pre-business feasibility study, the types of decisions faced by managers of small firms, and the application of business disciplines to these situations. The student will be required to formulate their own business plan.

Prerequisites: ENGL 101, or permission of instructor

Course Descriptions: Business/Management

BSAD 220 **PRINCIPLES OF RETAILING** *Fall, 3 credit hour(s)*

This course represents a pragmatic approach to the study of retailing. Students identify best practices in retailing by examining case studies of real-world retail businesses. Students explore retail management alternatives relating to buying, pricing, sales promotion, customer service, store design, and staffing.

Prerequisites: 15 credits earned, or permission of instructor

BSAD 222 **PRINCIPLES OF SELLING** *Fall, 3 credit hour(s)*

This course focuses on the personal selling process and is designed to benefit students across multiple disciplines, especially students wishing to develop a competency in sales. Students focus on the role of consumer behavior and effective communication as applicable to personal selling. Students identify and examine selling principles such as persuasive communication, negotiating, prospecting, preparing and delivering sales presentations, overcoming objections, and closing the sale.

BSAD 235 **BUSINESS AND ACCOUNTING FIELD EXPERIENCE** *Fall/Spring, 3 credit hour(s)*

This internship is designed as an elective course for students on a space-available basis who would like to obtain hands-on experience working with entrepreneurs and small business owners. The accounting portion of the internship is an academic program which integrates classroom work and practical experience with businesses and nonprofit organizations. The internship will be tailored to the individual student's career interests and the needs of the supervisor and supervising organization.

Prerequisites: ACCT 102 or permission of instructor.

BSAD 241 **INVESTMENT AND TRADING** *Spring, 3 credit hour(s)*

This course is designed for students interested in securities markets. This course will provide an opportunity for students to blend the theory of investments with the practical demands of investment management. The course objectives include an understanding of the process of establishing a portfolio strategy with a real portfolio, gaining knowledge of the mechanics of trading, principles of equity valuation and technical analysis. Students actively manage a portfolio throughout the semester.

Prerequisites: ACCT 101 or permission from the instructor

BSAD 256 **ARTIFICIAL INTELLIGENCE IN BUSINESS** *Spring, 3 credit hour(s)*

This course explores the integration of artificial intelligence (AI) in business management, covering its applications, benefits, challenges, and future trends. Students will learn how to harness AI to enhance decision-making, improve operational efficiency, and drive innovation in business. The course combines theoretical knowledge with practical case studies and hands-on projects.

Prerequisites: BSAD 100 or HSMB 101 or CITA 110

BSAD 301 **PRINCIPLES OF MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course applies key management concepts to all organizations; domestic and international, profit and non-profit, manufacturing and service, brick and mortar and virtual. It provides direction to the management philosophy, realities and imperatives for efficient and effective decision making, planning, organizing, leading, and controlling used for superior organizational performance. It equips students with skills and tools needed to contend the challenges encountered in domestic and/or global environment of the 21st century and the implication for IT. It allows students to transfer this knowledge to practice.

Prerequisites: BSAD 100, HSMB 101, EADM 201 or BSAD 200 or BSAD 201 and minimum 30 credit hours with 2.0 GPA or permission of instructor.

BSAD 304 **BUSINESS ANALYTICS** *Spring, 3 credit hour(s)*

This course will introduce students to business analytics with a focus on prescriptive analytics and spreadsheet (Excel) modeling. Topics will include linear, integer, and nonlinear programming models (product mix, make or buy, plant location, etc.), distribution and network models (transportation, transshipment, shortest-route, etc.), and forecasting.

Prerequisites: (CITA 108, 109, or 110) and (MATH 111, 121, 141, 161, or 162) and minimum 30 credit hours

BSAD 305 **PUBLIC BUDGETING AND FISCAL MANAGEMENT** *Spring, 3 credit hour(s)*

This course exposes students to the technical, political, and administrative elements of the federal, state, and local budgeting process. Topics will include budget formulation, execution, evaluation, and the theoretical basis for decision-making that is integral to that process.

Prerequisites: ECON 101 or ECON 103, ENGL 101, MATH 121 or MAT 141 and completion of 45 semester credit hours

BSAD 306 **FOOD AND BEVERAGE MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course discusses the roles and responsibilities of food and beverage management in the hospitality industry. Emphasis is placed on restaurant and bar operations in the hospitality industry including resort, hotel and conference activities. The receiving, process and storage of food and beverages are emphasized along with compliance of federal regulations regarding food and beverage operations. Sustainability in food and beverage management are addressed.

Prerequisites: BSAD 100; ACCT 101 or ACCT 104 and completion of 45 credit hours.

BSAD 309 **SUPPLY CHAIN MANAGEMENT** *Fall, 3 credit hour(s)*

This course introduces students to supply chain management. Students will learn about supply chain design, planning, and operations, and how to use supply chains to gain strategic advantage. Supply

chain topics covered include: distribution & transportation networks, sustainability, planning and coordination, customer and supplier relationships, sourcing, current events and trends.

Prerequisites: (BSAD 100 or BSAD 215 or BSAD 301 or CMGT 403 or EADM 201 or FSAD 214 or HSMB 101 or SPMT 101) and minimum 30 credit hours.

BSAD 310 **HUMAN RESOURCE MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course provides a foundation for the study of human capital management. Topics include job analysis and design, recruiting, training, motivating employees, performance appraisals, current doctrine on employee's rights, responsibilities, and compensation issues.

Prerequisites: BSAD 100 or BSAD 201 or EADM 201 and completion of 45 semester credit hours or permission of instructor.

BSAD 313 **CANNABUSINESS MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

The recent legalization of and demand worldwide for cannabis and related products has created a need for individuals who possess the skills, competencies, techniques, and knowledge to manage business practices within this highly specialized and controversial industry. This course will identify methods to gain and maintain a competitive advantage by showing the student how to apply traditional management principles to this niche industry's related challenges and advising how to analyze, evaluate, and address those issues.

Prerequisites: ENGL 101 and completion of 45 semester credit hours or permission of the instructor

BSAD 316 **DIVERSITY, EQUITY, & INCLUSION IN THE WORKPLACE** *Fall, 3 credit hour(s), GER 3*

This course will provide students with knowledge of terms, concepts, and legal standards associated with diversity, equity, and inclusion in the workplace. Students will review legal cases of discrimination in the workplace and review the best practices of companies and organizations leading in the areas of diversity, equity, inclusion, and social justice. Students will learn about leadership actions supportive of inclusive & equitable management and business practices. Students will also learn about their legal rights as employees and resources available to them. Through written assignments, students will propose actions in support of an inclusive, equitable, and socially just process in various organizational functions.

BSAD 319 **PROFESSIONAL ETHICS** *Fall/Spring, 3 credit hour(s)*

This course acquaints students with the major frameworks for ethical decision making in the professions based on Kantian, Utilitarian and Aristotelian ethics and the principles of consequence, liberty, opportunity, need and justice. The course examines ethical questions that can arise in the professional practice, the relationship between professionals and clients, as well as, the connection between ordinary and professional morality. Students will analyze and synthesize ethical theories that affect thinking, policy formulation, and professional conduct

Prerequisites: ENGL 101 and junior level status

Course Descriptions: Business/Management

BSAD 322 **ADVERTISING AND PROMOTION** *Fall/Spring, 3 credit hour(s)*

Students explore the fundamentals of advertising and promotion and apply this knowledge in creating an advertising plan and integrated brand promotion (IBP) strategy for a real world product. In addition to traditional advertising media, special attention is given to progressive advertising media, such as: the Internet, social media, mobile marketing, and other forms of digital marketing. The social and economic role of advertising and promotion is explored in relationship to such established disciplines as psychology and sociology.

Prerequisites: BSAD 203, or GMMD 101 and GMMD 102; and 45 credits earned; or permission of instructor

BSAD 325 **CONSUMER BEHAVIOR** *Fall/Spring, 3 credit hour(s)*

Students explore consumer behavior and its internal and external influencers. Emphasis is placed on the consumer decision-making process. Consumer behavior is analyzed as a key component in developing effective product design, positioning, and promotional strategies. Students also examine the role of consumer lifestyle data in segmenting the market into target markets.

Prerequisites: BSAD 203 and 45 credit hours, or permission of instructor

BSAD 330 **SALES FORCE MANAGEMENT** *Spring, 3 credit hour(s)*

Students explore the principles of sales force management. This course is designed to benefit students across multiple disciplines, especially students planning to pursue a career in sales. Emphasis is placed on the following principles of sales force management: formulating and evaluating sales strategy, recruitment, training, motivation, performance evaluation, and sales force structure.

Prerequisites: BSAD 203 Marketing and 45 credits earned, or permission of instructor

BSAD 335 **ADVANCED BUSINESS AND ACCOUNTING FIELD EXPERIENCE** *Fall/Spring, 3 credit hour(s)*

This advanced business internship program offers hands-on experience working with small business entrepreneurs in a confidential and professional environment. Students have the opportunity to apply their educational, organizational and time management skills in solving real life business issues and assist less experienced interns.

Prerequisites: ACCT 102

BSAD 340 **MANAGEMENT COMMUNICATIONS** *Fall/Spring, 3 credit hour(s)*

This course introduces students to the foundations of effective management communication. It focuses on communicating strategically and persuasively in a professional environment. Skills such as advocacy, framing issues clearly and strategically, preparing a team for communicating in a competitive environment, facilitating meetings, and adapting arguments to audiences' needs are developed.

Prerequisites: ENGL 101 and completion of 45 semester credit hours or permission of the instructor

BSAD 345 **TECHNICAL INNOVATIONS & ENTREPRENEURSHIP** *Spring, 3 credit hour(s)*

Technology entrepreneurship is a spirited approach to business leadership that involves identifying high-potential, technology-intensive commercial opportunities, gathering and analyzing resources such as talent and capital, and managing rapid growth and significant risks using principled decision-making skills. It is a recent global phenomenon that has driven vital changes in society by empowering individuals to seek opportunity in technological and business solutions when presented with what others see as insurmountable problems. This course will introduce the fundamentals of technology entrepreneurship. It is aimed at guiding students who may be starting their own businesses in the future or working for a high-growth company.

Prerequisites: ECON 101, FSMA 210 and CITA 110 or permission of instructor

BSAD 365 **FINANCIAL STATEMENT ANALYSIS** *Fall/Spring, 3 credit hour(s)*

This course explores both the underlying theory and practical applications of financial reporting and analysis. Students will expand their existing knowledge of financial statement preparation developed from their accounting coursework extending their critical thinking acumen into forecasting and various valuation models. Within this course an emphasis of the importance of using financial statements as a source of information to evaluate historical and future economic performance is the overarching learning objective. Discussion of the convergence of Generally Accepted Accounting Principles and International Financial Reporting Standards will occur when appropriate.

Prerequisites: ACCT 102 or ACCT 104, MATH 141, and junior level standing, or permission of instructor.

BSAD 372 **E-COMMERCE** *Spring, 3 credit hour(s)*

This course is designed to provide an overview of e-commerce models, applications, decisions, and issues. Major topics associated with e-commerce such as security, privacy, intellectual property rights, authentication, encryption, acceptable use policies, and legal liabilities are examined. In addition, business and revenue models, startup strategies, the evolution of social commerce, and additional emerging technologies are explored.

Prerequisites: CITA 110 and ENGL 101 and junior level standing or permission of the instructor

BSAD 373 **INTERNATIONAL BUSINESS MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

The course enhances the student's ability to operate in a global market. This course grounds the student in global marketing, strategy, human resource management. Students develop a strong understanding of international culture and ethical issues when taking a local business global. This course teaches students to use an organization's global resources and logistics to enable the organization's global strategy.

Prerequisites: ENGL 101, ECON 101

BSAD 375 **LEADERSHIP AND CHANGE** *Fall/Spring, 3 credit hour(s)*

The course will prepare students with the theory, tools, and competency needed to harness modern leadership principles in challenging organizational environment. In this course students will study leadership paradigms including the trait, skill, style, behavioral, situational, and contingency leadership models as well as power, leader-follower relations, ethics, and diversity.

Students will acquire skills to revolutionize organizations, its environment, culture, and overcome organizational crisis.

Prerequisites: BSAD 301 or permission of the instructor

BSAD 400 **OPERATIONS/PRODUCTIONS MANAGEMENT** *Fall, 3 credit hour(s)*

This course focuses on the study of modern theory and practice relating to the operations function in both manufacturing and service organizations. Every organization deals with operations planning and management, its operations managers are responsible for designing, running, controlling, and improving production systems. Topics include: documentation and evaluation of processes, capacity and resource planning, constraint management, lean systems, inventory management, forecasting, project management, quality management and control.

Prerequisites: (BSAD 100, BSAD 215, BSAD 301, BSAD 309, FSAD 214 or HSMB 101) AND (MATH 141 or BSAD 204), AND minimum 45 credit hours.

BSAD 406 **CUMULATIVE EVALUATION IN BBA IN MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course integrates the program material from the BBA in Management into a summative evaluation through company simulation software. Students incorporate knowledge of human resource management, operations management, managerial economics, professional ethics, business strategy, accounting and finance, and management of technology by running a virtual company.

Prerequisites: Completion of a minimum of 90 credit hours in the Bachelor Business Administration in Management Degree.

BSAD 407 **THE MEETING, EXPOSITIONS, EVENTS, AND CONVENTIONS (MEEC) INDUSTRY** *Fall/Spring, 3 credit hour(s)*

This course presents the scope, components, development and future of the Meetings, Expositions, Events and Conventions (MEEC) industry. Industry structure, specific areas related to food service management, exhibitions and events operations, and the techniques and procedures required for producing successful and sustainable events will be covered.

Prerequisites: BSAD 206 or permission of the instructor.

BSAD 410 **SENIOR PROJECT** *Fall/Spring, 6 credit hour(s)*

Student will complete a senior research project specifically addressing issues facing the management environment today.

Course Descriptions: Business/Management, Chemistry

Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee.

Prerequisites: Senior status in the BBA in Management Program and approval by instructor

BSAD 411 **MARKET RESEARCH** *Fall/Spring, 3 credit hour(s)*

This course integrates the program material from the BBA in Management into a summative evaluation through company simulation software. Students incorporate knowledge of human resource management, operations management, managerial economics, professional ethics, business strategy, accounting and finance, and management of technology by running a virtual company.

Prerequisites: MATH 141 and BSAD 203

BSAD 420 **APPLIED ORGANIZATIONAL** **MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course emphasizes individuals' and groups' behavior in organizations. The rationale for the existence of organizations is discussed with the strategic objectives of improving productivity, performance, effectiveness, and efficiency to accomplish goals. Theories of human behavior in organizations will be examined. Additional topics covered will include group development, group decision making and problem solving, leadership roles, power and politics within organizations. Other important areas of analysis will be the norms and values of groups, group power, influence, coalition formation and organizational culture.

Prerequisites: BSAD 100 or junior level status

BSAD 421 **SIX SIGMA AND LEAN** **MANUFACTURING** *Spring, 3 credit hour(s)*

This course discusses the origin and implementation of six sigma processes into manufacturing. The course investigates both the management and leadership of successful continuous improvement projects. The course introduces the students to the DMAIC process and applies the DMAIC process to class projects. The course aids in student preparation toward a green belt in six sigma.

Prerequisites: MATH 141 and BSAD 301, or MECH 350

BSAD 425 **NEW PRODUCT MARKETING** *Fall, 3 credit hour(s)*

This course requires students to integrate concepts from previous marketing courses and develop a comprehensive marketing strategy. Through market analysis students identify market opportunities for new product development and formulate an effective marketing strategy to move their product from concept to launch. The course culminates with a marketing strategy competition where each group is evaluated based on the content of their final report, project presentation, and feasibility of their marketing strategy. Students work on their project in groups modeled after a consulting group.

Prerequisites: BSAD 322 or BSAD 325, and 60 credits earned; or permission of instructor.

BSAD 449 **STRATEGIC POLICIES AND ISSUES** *Fall/Spring, 3 credit hour(s)*

This course will define the criteria for critical business decision making. Students will examine strategic issues in international and domestic organizations, use core concepts and analytical tools, and assess the impact of political, economic, and legal factors on business operations and strategies. Real case study of headline issues will be used to provide insights and focus attention on the special demands of competition, competitive advantage, and winning strategy execution.

Prerequisites: ECON 103, FSMA 210, BSAD 203, and BSAD 301 and junior level status or permission of the instructor.

BSAD 450 **BUSINESS INTERNSHIP** *Fall/Spring, 3 credit hour(s)*

The business internship is an academic program which integrates classroom work and practical experience with cooperating businesses. It is a structured field experience in which an intern acquires and applies knowledge and skills, while working in a responsible role within a business environment. Internship assignments and activities may include, but not limited to, information gathering, research, data analysis, planning, organization, implementation, evaluation, and other tasks and responsibilities deemed necessary.

Prerequisites: Senior status in Management, BBA and Grade Point Average of 3.0 or higher before the internship begins, or permission of the instructor in consultation with the student's advisor.

BSAD/HTMT 302 **CUSTOMER SERVICE AND THE GUEST** **EXPERIENCE IN HOSPITALITY** *Fall, 3 credit hour(s)*

Today's customers have access to more information about products and services than ever before. Customer satisfaction is therefore critical for hospitality organizations to establish, maintain, and enhance market share. This course focuses on the provision of excellent customer service in hospitality and its impact on the guest experience and hospitality organizations. Coursework will include the analysis of case studies involving top hospitality organizations, enabling students to develop strategic plans to provide the "wow" in customer service and the guest experience.

Prerequisites: BSAD 100 or permission of instructor

BSAD/HTMT 303 **GLOBAL TOURISM: PERSPECTIVES AND** **PRACTICES** *Spring, 3 credit hour(s)*

This course offers an overview of the global tourism industry as it relates to hospitality services. Traveler behavior, tourism planning, and the economic and social impacts of tourism are studied.

Prerequisites: BSAD 100 or permission of instructor

BSAD/SOET 361 **PROJECT MANAGEMENT** *Fall, 3 credit hour(s)*

This course is an introduction to projects and project management as it pertains to Industry. Students will be introduced to principles of project selection, project planning & scheduling, duties of a

project manager, project organization, implementation and termination.

Prerequisites: Junior standing or permission from instructor.

BSAD/SOET 370 **ENGINEERING ECONOMICS** *Fall/Spring, 3 credit hour(s)*

This course emphasizes the strong correlation between engineering design and manufacturing of products/systems and the economic issues they involve. The basic concepts of the time value of money and economic equivalence are applied throughout the course. Each assignment progressively incorporates different cash flows, the cost of funds, capital, operational and maintenance costs, salvage value, depreciation, and taxation. Students learn to apply different economic analysis methods – like discounted cash flow analysis, present worth, annual-equivalent worth, rate-of-return, cost/benefit etc – in evaluating the economic viability of a project, as well as the comparison of mutually exclusive alternatives. The course also introduces concepts of replacement decisions, a few methods of describing project risk, and exposes students to specific issues of economic analysis of the private sector versus the public sector. Applications to a variety of engineering fields' actual cases are stressed throughout the course.

Prerequisites: MATH 121, MATH123, Junior status or permission of instructor.

BSAD/SOET 430 **SYSTEMS ANALYSIS** *Fall/Spring, 3 credit hour(s)*

This course will enable students to learn and apply the skills a systems analyst needs to improve organizational processes. It will focus on the assessment of the users' interaction with technology and business functions, and on the analysis of data flow and its conversion into information. The course also explores some concepts of requirements engineering. A familiarity with MS Office (or similar product) is expected.

Prerequisites: Junior/Senior status; GER math

CHEM 100 **INTRO TO CHEMISTRY LABORATORY** *Fall/Spring, 1 credit hour(s), GER 2*

This is a laboratory course to accompany CHEM 101. The activities and experiments in this course are hands-on applications of the concepts covered in CHEM 101. It is designed for those students who have had little or no chemistry laboratory experience. Students must enroll in both CHEM 101 and CHEM 100 simultaneously, unless they have previously passed one of the courses. Students must also pass both CHEM 101 and CHEM 100 to receive Natural Science General Education credit.

Prerequisites: None - Co-requisite: CHEM 101, or permission of instructor.

CHEM 101 **INTRO TO CHEMISTRY** *Fall/Spring, 3 credit hour(s), GER 2*

This is an overview of chemistry which will include atomic structure, English-metric unit conversions, chemical nomenclature, the mole concept, stoichiometry, chemical reactions, physical behavior of gases, solutions, acid-base theory, and nuclear chemistry. It is designed for those students who have little or no chemistry background. Three hours lecture, two hours laboratory per week. For students

Course Descriptions: Chemistry, Computer

who did not pass the NYS Chemistry Regents exam or who did not take HS chemistry.

Prerequisites: Beginning Algebra (MATH 100) or high school equivalent, or permission of instructor.

CHEM 107 INVESTIGATIVE CHEMISTRY *Spring, 3 credit hour(s), GER 2*

This is a basic introduction to chemistry course designed to cover topics and methods used in forensic science. This course will include atomic structure, measurements and conversions, inorganic and organic chemical nomenclature, the mole concept, chemical reactions and stoichiometry, solution chemistry, acid-base theory, physical behavior of gases, calorimetry, chemical kinetics, dynamic equilibrium, and nuclear chemistry. In addition, it will discuss the chemistry of explosions, the nature of drug molecules and how they relate to addiction, as well as the use of DNA in analyzing evidence. It is designed for those students who have little or no chemistry background. Conditions: For students who did not pass the NYS Chemistry Regents exam (

Prerequisites: MATH 100 or high school equivalent or permission of instructor. Co-requisite: CHEM 108. A student cannot receive credit for both CHEM 101 and CHEM 107.

CHEM 108 INVESTIGATIVE CHEMISTRY LAB *Spring, 1 credit hour(s), GER 2*

Investigative Chemistry Laboratory is a laboratory course to accompany Investigative Chemistry (CHEM 108). This laboratory course is designed to provide scientific laboratory experiences in chemistry relevant to forensic science. Each exercise involves the collection of data, manipulation of the collected data, and analysis of the data. The experiments include density of plastic material, chromatographic analysis of ink, types of chemical reactions, factors that affect the rate of chemical reactions, detection of common gases, spectroscopic analysis of analgesics, qualitative analysis of blood and urine, breathalyzer test, detection of blood, heat capacity of building materials, fingerprint development methods, and detection of gunshot residue. Two hours per week.

Prerequisites: None - Co-requisite: CHEM 107 or permission of instructor. A student cannot receive credit for both CHEM 108 and CHEM 100.

CHEM 120 GENERAL ORGANIC & BIOCHEMISTRY *Fall/Spring, 3 credit hour(s), GER 2*

An integration of general chemistry, organic chemistry and biochemistry providing the student with a basic understanding of chemical processes and knowledge useful in a variety of degree programs. Topics include matter/atomic structure review, chemical bonding, intermolecular forces, physical behavior of gases, solutions, chemical kinetics, chemical equilibrium, acid/base equilibrium including buffers, an overview of organic chemistry, and an overview of biochemistry. The course is particularly useful to students in health related curricula where an understanding of life processes at the molecular level is essential. This course requires the corequisite of CHEM 121 the first time CHEM 120 is attempted.

Prerequisites: High School Regents Chemistry (65 grade minimum), or CHEM 101 and High School Algebra or MATH 106. - Co-requisites: CHEM 121

CHEM 121 GENERAL ORGANIC & BIOCHEM LAB *Fall/Spring, 1 credit hour(s), GER 2*

The laboratory component of CHEM 120 (General, Organic, and Biochemistry). The course includes experiments in measurement principles, thermodynamics, kinetics, gravimetric analysis, physical behavior of gases, spectroscopy, radiochemistry, solutions, organic chemistry separation techniques and organic chemical synthesis. This course must be taken with CHEM 120 or after CHEM 120 has been successfully completed.

Prerequisites: NYS Chemistry Regents (65 grade minimum) or CHEM 101 and HS algebra or MATH 106, or permission of instructor. Co-requisites: CHEM 120 or after CHEM 120 has been successfully completed, or permission of instructor.

CHEM 150 COLLEGE CHEMISTRY I *Fall, 4 credit hour(s)*

This is the first semester of a two-semester college level course in chemistry. Topics include atomic structure, the periodic chart, moles, chemical reactions, stoichiometry, aqueous solutions, gas laws, gases in the atmosphere, thermochemistry, and chemical bonding theory.

Prerequisites: NYS Chemistry Regents Exam of 65 or above or Introduction to Chemistry (CHEM 101/100) or Investigative Chemistry (CHEM 107/108), and Intermediate Algebra (MATH 106) or high school equivalent, or permission of instructor.

CHEM 155 COLLEGE CHEMISTRY II *Spring, 4 credit hour(s)*

This is the second semester of a two semester college level course in chemistry. Topics include: bonding, intermolecular forces, solutions, chemical kinetics, chemical equilibrium, acids and bases, free energy concepts, and nuclear chemistry.

Prerequisites: College Chemistry I (CHEM 150) or permission of instructor.

CHEM 301 ORGANIC CHEMISTRY I *Fall, 4 credit hour(s)*

Organic Chemistry I is the first semester of a two semester sequence of organic chemistry which is applicable for Liberal Arts: Science and Engineering Science curricula. The lecture portion of the course will include chemical bonding, acid/base theory, thermodynamics, kinetics, organic structure, isomerism, stereochemistry, infrared spectroscopy, CMR/PMR nuclear magnetic resonance spectroscopy, mass spectroscopy, nomenclature principles, and the chemistry of several organic chemical functional groups. The laboratory portion of the course will include methods of, purification/separation of organic chemicals, chemical kinetics, instrumental analysis techniques, and several organic syntheses.

Prerequisites: CHEM 155 or permission of instructor.

CHEM 302 ORGANIC CHEMISTRY II *Spring, 4 credit hour(s)*

This course is a continuation of Organic Chemistry I. The lecture portion of the course will include oxygen containing functional groups, aromaticity, benzene and its derivatives, carbanions, nitrogen containing functional groups, and heterocyclics. The

laboratory portion of the course will be comprised of organic syntheses.

Prerequisites: CHEM 301 or permission of instructor.

CHEM 430 BIOCHEMISTRY *Fall, 4 credit hour(s)*

This course provides an introduction to the structure and function of biological macromolecules, bioenergetics, and transfer of genetic information. Emphasis will be on protein structure and function, enzyme catalysis, an overview of energy metabolism, and the maintenance and expression of genetic information.

Prerequisites: CHEM 302 or permission of instructor.

CITA 100 COMPUTER FLUENCY *Fall/Spring, 3 credit hour(s)*

This course is a survey of the knowledge required for the programming courses in the CIS and IT degrees. It introduces basic computing concepts of number systems common to computers, logic operators and expressions, file management, and computer programming techniques. The course is intended for students who do not meet the minimum academic requirements to enter either the Computer Information Systems or Information Technology majors but desire to pursue a major in one of those programs.

CITA 101 LIBRARY/INFORMATION LITERACY *Fall/Spring, 1 credit hour(s)*

This course will focus on the organization, use and retrieval of information, both within and outside of the library. Students will gain an understanding of the characteristics of information and be able to locate and critically evaluate it. Instruction will focus on both print and electronic information resources.

CITA 103 INTRODUCTION TO WORLD WIDE WEB *Fall/Spring, 1 credit hour(s)*

This course will introduce students to the World Wide Web (WWW) and Microsoft Outlook. This course will offer instructions on how to use Internet Explorer and Microsoft Outlook for searching information on the internet, send and receive email, maintain a contact list, keep a calendar, and schedule meetings and events.

CITA 104 INTRODUCTION TO DATABASE *Fall/Spring, 1 credit hour(s)*

This course introduces the student to the fundamentals of database programs.

Students will be exposed to the creation, maintenance and organizing of a database. The students will also create listings and reports.

CITA 105 INTERMEDIATE DATABASE *Fall/Spring, 1 credit hour(s)*

This course is designed to increase the students' knowledge of database fundamentals using an industry standard database package as the instructional platform. The student will learn to do more advanced querying of the database, create and use custom forms, create and use custom reports,

Course Descriptions: Computer

use the briefcase wizard, create action queries and macro writing.

Prerequisites: Introduction to Database (CITA 104) or permission of instructor. Two hours lecture per week for seven weeks.

CITA 106 INTRO TO WORDPROCESSING *Fall/Spring, 1 credit hour(s)*

This course is designed to help students attain the necessary skills and knowledge needed for effective operation of word processing software and equipment. This course will introduce concepts of word processing equipment, input, output, storage and retrieval, distribution and software. Major emphasis will be put on hands-on experience. Two hours lecture per week for seven weeks.

CITA 107 INTERMEDIATE WORD PROCESSING *Fall/Spring, 1 credit hour(s)*

This course is designed to help students attain advanced skills and knowledge needed for effective operation of word processing software and equipment. Major emphasis will be put on hands-on experience in learning how to design letterheads and newsletters, understanding the merging process, and creating tables.

Two hours lecture per week for seven weeks.
Prerequisites: CITA 106 or permission of instructor.

CITA 108 INTRO TO SPREADSHEETS *Fall/Spring, 1 credit hour(s)*

A course designed to introduce the student to the fundamentals of spreadsheets using Microsoft Excel as the instructional platform. Students will create worksheets with literal and numeric data. The numeric data will be constants and/or formulas.

Students will also learn and use the relative and absolute cell reference system in formulas. Printing of spreadsheets creating line, bar, and pie graphs will also be included.

CITA 109 INTERMEDIATE SPREADSHEETS *Fall/Spring, 1 credit hour(s)*

This course is designed to increase knowledge of spreadsheet fundamentals using an industry standard spreadsheet package as the instructional platform. The student will learn to work with lists, pivot tables, object linking and embedding, developing a complete worksheet application and macro writing.

Prerequisites: CITA 108 or SOET 101

CITA 110 INTRODUCTION TO INFORMATION TECHNOLOGY *Fall/Spring, 3 credit hour(s)*

This course is an introduction to information technology focusing on microcomputer applications and application software. It includes word processing, spreadsheet, database, electronic presentation and an introduction to HTML. Personal computer terminology, hardware system components, operating systems, and current web applications are covered. Hands-on experience is utilized throughout. A student who completes CITA 110 may not receive credit for any of the following one-credit courses in a degree program: CITA 106 Introduction to Word Processing, CITA 108 Introduction to Spreadsheets, nor CITA 112 Introduction to Electronic Presentations.

CITA 111 WEB PAGE DEVELOPMENT *Fall/Spring, 2 credit hour(s)*

This course will introduce students to the development process of web pages. The student will learn how to create and edit text (HTML) with a web authoring tool. They will learn how to use a draw/graphics software program to create, edit and use various types of graphic images (.GIF & .JPEG) to help maintain the surfer's interest. The student will learn how to setup and maintain hyperlinks to various sites and within the original document. Also, the student will learn how to create and use tables, image maps, thumbnails and animated GIFs.

Prerequisites: CITA 103 or permission of instructor.

CITA 112 INTRODUCTION TO ELECTRONIC PRESENTATIONS *Fall/Spring, 1 credit hour(s)*

This course is designed to show the student how to use desktop presentation software to prepare professional-looking presentations, combining text, charts and graphics. The students will also learn how to create typical business charts using a spreadsheet and enhancing those charts with additional software. You will experiment with animation using a drawing program, and create a presentation using various types of charts and show

it to the entire class. Two hours lecture per week for seven weeks.

CITA 113 INTRODUCTION TO MOBILE CLOUD COMPUTING APPS *Fall/Spring, 3 credit hour(s)*

This course is an introduction to information technology focusing on mobile computing applications and cloud storage. It includes word processing, spreadsheet, database, multimedia presentation and an introduction to project management, voice assistance and edge computing. Mobile computer technology, operating systems, and current web applications are covered. This is a project-based course. Students taking the course should have and plan to use a mobile device utilizing the most recent versions of iOS or Android OS. A student who completes CITA 113 will not receive credit for any of the following courses in a degree program: CITA 106, CITA 108,

CITA 110, or CITA 112.

CITA 116 VERIZON COMPUTER APPLICATIONS *Fall, 3 credit hour(s)*

This course is an introductory course in basic computer orientation to hardware and implementation of software applications in Telecommunications. Students use various software packages to create documents, spreadsheets, graphs, and presentations. The student utilizes this knowledge to solve problems and transfer information via electronic medium.

Prerequisites: Permission of instructor.

CITA 152 COMPUTER LOGIC *Fall/Spring, 3 credit hour(s)*

This course provides a foundation necessary to create structured program logic. It introduces students to programming concepts and program design through the study of a programming language

with a reduced set of instructions. Topics include number systems, relational and logical operators, understanding structures, arrays, making decisions and problem solving skills used in computing.

CITA 163 SURVEY OF INFORMATION TECHNOLOGY *Fall/Spring, 3 credit hour(s)*

This course is an introductory survey of Information Technology (IT) and IT terminology. Emphasis is on current and emerging technologies. Topics include: computer system components, communications and networks including the Internet, basic concepts in programming languages, information system development, IT impact on society, security, privacy and ethics.

CITA 170 COMPUTER CONCEPTS AND OPERATING SYSTEMS *Fall/Spring, 3 credit hour(s)*

In this course, students will learn the terminology and concepts of hardware and software for computer systems. Topics will include system hardware components, memory organization, and management, operating systems, troubleshooting fundamentals, etc.

CITA 171 OPERATING SYSTEMS USE AND ADMINISTRATION *Fall/Spring, 3 credit hour(s)*

This is a project intensive course covering current operating systems. Projects are designed to give students an overview of operating systems, and encompass the major aspects of operating systems. This course may be used as a first step for students wishing to obtain industrial certification for current operating systems.

Prerequisites: None - Corequisite: Computer Concepts & Operating Systems (CITA 170) or permission of instructor.

CITA 175 COMPUTER CONCEPTS AND OPERATING SYSTEMS LAB *Fall/Spring, 1 credit hour(s)*

This laboratory course is to accompany the lectures of CITA 170 Computer Concepts and Operating Systems course. Students will disassemble and reassemble PCs, become familiar with hardware components, learn to collect information about the computer system, install and configure system software, and test and troubleshoot the system to apply the various concepts covered in the course.

Prerequisites: None - Corequisite: Computer Concepts & Operating Systems (CITA 170)

CITA 180 INTRODUCTION TO PROGRAMMING *Fall/Spring, 4 credit hour(s)*

In this course, students will learn the fundamentals of programming problem-solving with algorithms. Students will learn how to work with variables to store information for later use. Student will put the following coding structures into play – sequential, decision, and repetition to solve a problem. Students will then focus on the reuseability of code with methods and modules.

Prerequisites: CITA 152

CITA 202 COMPUTER USER SUPPORT CONCEPTS AND SKILLS

Fall/Spring, 3 credit hour(s)

People interested in becoming a computer support specialist or systems administrator must have strong problem-solving, analytical, and communication skills because troubleshooting and helping others are vital parts of the job. This course prepares the support specialist to maintain customer satisfaction by focusing on the needs of the customer, establishing credibility and trust, and by handling the most difficult customer scenarios. Emphasis is given to problem solving and troubleshooting, team dynamics, and interpersonal communication skills. It also provides a broad overview of the back-office operations of a help desk, and exposes the student to common industry tools and technologies used in providing exceptional customer support.

Prerequisites: Computer related course or permission of instructor

CITA 204 SYSTEMS ANALYSIS AND DESIGN

Spring, 3 credit hour(s)

A course designed to guide the student through the evolution of a system, an analysis of the present flow of information and the specifications, selection and implementation of information processing systems. The scope of a system development study will transcend mere knowledge of specific systems to include a study of the total management system.

Prerequisites: CITA 180 or CITA 215

CITA 215 DATABASE APPLICATION AND CONCEPTS

Spring/Fall, 3 credit hour(s)

In this course, students will learn the fundamentals of working with a database. Students will learn database organization. Students will learn to work with tables to extract data to answer questions – select, from, where, group by, having, order by. Students will learn to work with data types and database functions to enhance queries.

Prerequisites: CITA 152

CITA 220 DATA COMMUNICATIONS AND NETWORK TECHNOLOGY

Fall/Spring, 3 credit hour(s)

A study of terminology, hardware and software associated with data communications and network technology. Areas of study include design principles for human-computer dialogue, selection criteria for communications devices, the technology of data transmission, techniques and message protocols for line control and error processing, local area networks, networking concepts, network topologies and access control, network performance, network services and design issues, and network media and access methods. Design, configuration, operation and maintenance questions are explored. Topics include end-user perspective, network operating systems, cabling, hardware protocols, software and applications, design, and administration. This course should be taken concurrently with CITA 221 Data Communications and Network Technology Lab course.

Prerequisites: CITA170 , CITA 171, and MATH 106

CITA 221 DATA COMMUNICATIONS AND NETWORK TECHNOLOGY LAB

Fall/Spring, 1 credit hour(s)

This laboratory course is to accompany the lectures of CITA 220 Data Communications and Network Technology course. Students will obtain hands-on experience on data communications and network technology throughout this course.

Prerequisites: Operating system Fundamentals (CITA 171), Intermediate Algebra (MATH 106) or permission of instructor.

CITA 260 INTRODUCTION TO WIRELESS TECHNOLOGY

Spring, 3 credit hour(s)

This course introduces various aspects of wireless technology including wireless networks, authentication, protocols, security, installation considerations, and standards. Projects to determine signal strengths from different antenna types and locations are assigned.

Prerequisites: Data Communications and Network Technology (CITA 220) or permission of instructor.

CITA 310 WEB SERVER ADMINISTRATION

Fall, 3 credit hour(s)

A comprehensive survey of all aspects of Web server administration. Students gain hands-on experience by actually installing and administering their own Web servers in a lab environment. Topics include: server installation and configuration, site planning, supporting dynamic content with CGI's and ASP's server maintenance and site security.

Prerequisites: Data Communications and Network Technology (CITA 220) or permission of instructor

CITA 325 BUSINESS INTELLIGENCE SUITE

Fall, 3 credit hour(s)

This course exposes the students to a set of Microsoft Business Intelligence tools: Excel, SQL Server, Reporting Services, and PowerBI. These technologies provide skills on organization, strategy, performance, and competitiveness. Students examine how these tools are used in various fields.

Prerequisites: Introduction to Information Technology (CITA 110), Database Systems with Web Applications (CITA 215), and Statistics (MATH 141).

CITA 330 EMERGING INFORMATION TECHNOLOGY APPLICATIONS

Spring, 3 credit hour(s)

A comprehensive survey of emerging information technology applications. This course covers Web application development with XML, multimedia topics including graphics / audio / animation / video / presentations / desktop publishing / Web publishing, and input technologies including speech / handwriting recognition. The course also includes additional continuously updated topics on most current state-of-the-art IT applications.

Prerequisites: Junior level status in a 4-year program or permission of instructor

CITA 342 VISUAL PROGRAMMING AND DEVELOPMENT TOOLS

Fall, 3 credit hour(s)

An introduction to the development of computer applications using rapid development tools such as Visual Basic or Visual C++. Emphasis is on designing and managing graphical user interfaces, procedures, file management, debugging and testing.

Prerequisites: Introduction to Programming (CITA 180) or GMMD 121 Programming for Visual Arts and Design

CITA 354 CYBER INCIDENT RESPONSE AND DISASTER RECOVERY

Fall, 3 credit hour(s)

This course presents methods to identify vulnerabilities within computer networks and the countermeasures that mitigate risks and damage. It covers market-leading content on contingency planning, effective techniques that minimize downtime in an emergency, and ways to curb losses after a breach in case of a network intrusion.

Prerequisites: CITA 250

CITA 356 CYBERSECURITY DEFENSE AND COUNTERMEASURES

Fall, credit hour(s)

This course provides a thorough guide to perimeter defense fundamentals, including intrusion detection and firewalls. It covers advanced topics such as security policies, network address translation (NAT), packet filtering and analysis, proxy servers, virtual private networks (VPN), and network traffic signatures. This course examines the latest technology, trends, and techniques including virtualization, IPv6, and ICMPv6 structure, making it easier to stay on the cutting edge and one step ahead of potential security threats.

Prerequisites: CITA 250

CITA 360 CRYPTOLOGY IN THEORY AND PRACTICE

Spring, 3 credit hour(s)

This course provides a background in the characteristics of different cryptologic schemes. It introduces students to protocols and key establishment methods required for certificates and public key infrastructure.

Prerequisites: CITA 165 or CITA 220

CITA 371 WORKING WITH DATA VISUALIZATION TOOLS

Fall/Spring, 3 credit hour(s)

The Power BI Desktop course provides a foundation to work with this handy data visualization tool. Data visualization allows us to see insight into our data that would not be visible by just looking at the numbers – it will enable us to see trends and patterns for better decision making. Perfect data does not always exist to support your data visualizations – data will need massaging.

The Power Query editor uses the M language to extract, transform, and load data for use in the Power BI Desktop. The Power Query editor will allow you to shape data from various sources to power your data visualizations. Data can come from multiple sources and be fragmented. The Power Editor allows

Course Descriptions: Computer

you to pull data from numerous data sources to produce a unified data set to perform data analysis. Data sources can be merged and stacked together.

Prerequisites: CITA 110, CITA 163 or permission of instructor

CITA 380 INTEGRATED PROGRAMMING FOR ENGINEERS

Spring, 3 credit hour(s)

This course develops methodologies and techniques for program creation and implementation to solve mathematical and engineering problems. The students will be exposed to solving mathematical problems such as simultaneous equations and to performing engineering data acquisition from local sources as well as remote sources using high-level programming languages, scripting languages, and commercial off-the-shell products such as MATLAB.

Prerequisites: CITA 220, ENGS 203, MATH 263 (prior programming and networking knowledge preferred)

CITA 400 QUANTITATIVE APPROACHES TO MANAGEMENT

Spring, 3 credit hour(s)

This is the study of the decision-making process and how quantitative methods are used to find solutions to business problems. Computer software tools are used to analyze and process data. Opportunities, problems and decisions that confront managers are analyzed and solutions are developed. Topics covered include, but are not limited to: Cost-volume-profit analysis, forecasting, decision theory, linear programming, probability concepts and applications, inventory control, queuing theory, and game theory.

Prerequisites: Statistics (MATH 141) or permission of department.

CITA 401 POWERSHELL SCRIPTING AND AUTOMATION

Spring, 3 credit hour(s)

This course serves as an introduction to PowerShell, a robust scripting language and automation framework developed by Microsoft. Throughout the course, learners will develop the essential skills needed to effectively utilize PowerShell for system administration, task scripting, and automation. The course will cover the basic concepts and syntax of PowerShell, such as variables, data types, operators, functions, and control structures, through hands-on exercises and assignments. Students will also become proficient in navigating and interacting with the PowerShell environment, including working with the PowerShell Integrated Scripting Environment (ISE) and the command-line interface. Additionally, they will gain proficiency in manipulating various types of data. Advanced topics covered in the course include working with modules, implementing scripting best practices, handling errors, and performing remote administration. By the end of the course, students will have a strong foundation in PowerShell scripting and automation, enabling them to create scripts that automate tasks, streamline administration processes, and boost productivity in a Windows environment.

Prerequisites: CITA 180.

CITA 420 PROGRAMMING FOR THE WEB

Fall, 3 credit hour(s)

This is a course on programming languages and techniques for Web development. Topics include server side programming, creating dynamic, database driven content, and developing Web based client/server database applications.

Prerequisites: Web Server Administration (CITA 310) and Emerging Information Technology Applications (CITA 330), or permission of instructor.

CITA 441 NETWORK MANAGEMENT LAB

Fall/Spring, 1 credit hour(s)

This laboratory course is to accompany the lectures of CITA 440 Network Management course. Students obtain hands-on experience on various network management tools, protocols, applications, and systems throughout this course.

Prerequisites: Data Communications and Network Technology Lab (CITA 221) or permission of instructor.

CITA 450 CYBERSECURITY BODY OF KNOWLEDGE

Spring, 3 credit hour(s)

This course provides a comprehensive, trustworthy framework of practices for assuring cybersecurity. It helps future security professionals understand how the various roles and functions within cybersecurity practice can be combined and leveraged to secure an organization. The course content is derived from the Department of Homeland Security's Essential Body of Knowledge (EBK) for IT Security and the International Information System Security Certification Consortium's Common Body of Knowledge (CBK).

Prerequisites: CITA 250.

CITA 455 ACCESS CONTROL, AUTHENTICATION, AND PUBLIC KEY INFRASTRUCTURE

Fall, 3 credit hour(s)

This course defines the components of access control, provides a business framework for implementation, and discusses legal requirements that impact access control programs. It looks at the risks, threats, and vulnerabilities prevalent in information systems and IT infrastructures and how to handle them with risk mitigation strategies and techniques. Access control systems and stringent authentication are presented as ways to mitigate risk. It also covers Public Key Infrastructure (PKI) components and how the various components support e-business and strong security services. Prerequisites: CITA 360

CITA 460 INFORMATION TECHNOLOGY AND NETWORKED ECONOMY

Fall, 3 credit hour(s)

This course examines the fundamental concepts and components of Information Technology from both managerial and professional end user perspective. The course also explores the foundations of information systems to the demands of electronic commerce, connectivity, and networked economy.

Prerequisites: Senior status in a four-year program or permission of instructor.

CITA 479 INFORMATION TECHNOLOGY INTERNSHIP ORIENTATION

Fall/Spring, 1 credit hour(s)

This course is designed as the precursor to the Senior Culminating Experience for seniors in the Canino School of Engineering Technology BT programs. Seniors will meet on a weekly basis with faculty to discuss resume preparation, job interviewing, locating and establishing internships, and internship requirements. The course will include an overview of transitional steps going from student to employee.

Prerequisites: All upper-level Information Technology core courses.

CITA 480 INFORMATION TECHNOLOGY INTERNSHIP

Fall/Spring, 6-12 credit hour(s)

Supervised field work in a selected business, industry, government or educational setting. Students carry out a planned program of educational experiences under direct supervision of an owner, manager or supervisor of information technology in an organization. Each intern will be supervised by a member of the faculty on a regular basis. Written and oral reports of work experience activities will be required. Evaluation will be based on the quality of experiences gained from the internship.

Prerequisites: Information Technology Internship Orientation (CITA 479) and senior status in the Information Technology program or permission of instructor.

CITA 481 SENIOR PROJECT IN INFORMATION TECHNOLOGY

Fall/Spring, 6 credit hour(s)

This course is an alternative course for students in Information Technology program who cannot find a 12-credit Internship position. The course requires extensive project development work to integrate the specialized skills and knowledge presented throughout other courses in the Information Technology curriculum. Under the guidance of a faculty mentor, the student prepares a project proposal, conducts literature review and project implementation, submits a project report, and makes an oral presentation.

Prerequisites: Information Technology Internship Orientation (CITA 479), and senior level status in Information Technology program, or permission of the program director.

CITA/MINS 300 MANAGEMENT INFORMATION SYSTEMS

Fall/Spring, 3 credit hour(s)

Students learn the concepts underlying the design, implementation, control, evaluation, and strategic use of modem, computer-based information systems for business data processing, office automation, information reporting, decision-making, and electronic commerce. The major emphasis of the course will be on the managerial and strategic aspects of information technology.

Prerequisites: Junior standing or the sum of credits earned and credits currently enrolled in is at least 60 or permission of instructor.

Course Descriptions: Computer, Civil Engineering

CITA/MINS 307 CUSTOMER RELATIONSHIP MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course provides information systems tools for building a customer-focused organization based on customer data and information. The course focuses on using current data to enhance relationships with customers, gathering data for future marketing endeavors and providing strategic guidance to the organization. The course provides insights into life-cycle management, customer lifetime value and measuring customer profitability. Three lecture hours per week.

Prerequisites: MINS/CITA 300 or permission of instructor.

CITA/MINS 315 DECISION SUPPORT SYSTEMS

Fall/Spring, 3 credit hour(s)

This course enables the student to turn raw data into information to help an organization's managers make decisions.

Students will develop decision making analytical models to provide organizational leaders with potential outcomes and their effects. Students will study the network's role in distributed systems, distributed systems development tools, and distributed systems issues. Students will apply data-mining techniques supporting knowledge-management decisions. Three hours lecture per week.

Prerequisites: MINS/CITA 300 or permission of instructor.

CITA/MINS 320 INTRODUCTION TO DATA MINING

Spring, 3 credit hour(s)

A systematic introduction to the basic principles, applications, techniques and models of data mining including classification, estimation, prediction, affinity grouping, clustering, description and profiling. The emphasis is on various data mining problems and their solutions.

Students will also be exposed to a sample of data mining applications. Topics include decision trees, artificial networks, nearest neighbor approaches, market basket analysis, and association rules. Three lecture hours per week.

Prerequisites: CITA 104 or CITA 215 and MATH 141 or permission of instructor.

CITA/MINS 425 ENTERPRISE RESOURCE PLANNING

Fall/Spring, 3 credit hour(s)

This course provides information systems tools to ensure a comprehensive resource planning system for all functions of businesses. The course will discuss the development and employment of enterprise resource planning for marketing, accounting, supply chain management, and human resources. Content will focus on practical applications of enterprise resource planning to ensure businesses get the greatest return on information systems investment. Three lecture hours per week.

Prerequisites: MINS/CITA 300 and Junior standing or permission of instructor.

CITA/MINS 430 DATA AND KNOWLEDGE MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course focuses on the development of a knowledge management system using an organization's tacit and explicit knowledge to execute

its strategy. Course explores practices entailed in developing a knowledge infrastructure, managing the interaction of people and technology, valuing knowledge assets, leveraging teams, and knowledge transferring across organizations. Three lecture hours per week. Management Information Systems (MINS 300), Junior standing or permission of the instructor.

Prerequisites: Management Information Systems (MINS/CITA 300) and Junior standing or permission of instructor.

CIVL 213 CIVIL ENGINEERING MATERIALS

Fall, 3 credit hour(s)

This course examines properties, common applications and methods for properly selecting the materials typically used in the constructed environment. The laboratory develops awareness with and expertise in conducting standardized field and laboratory tests on common civil engineering materials. The materials studied include aggregates, Portland cement concrete, masonry, and asphalt.

Prerequisites: ENGS 101, or permission from the instructor.

CIVL 303 STRUCTURAL ANALYSIS

Fall, 3 credit hour(s)

This course introduces the basic analysis and computer methods that are required to analyze basic structural elements and simple structures. Key topics include design loads, analysis of statically determinate beams, frames, and trusses, as well as shear and moment diagrams and influence diagrams. Students will also learn about beam deflections, statically indeterminate structures (including beams and frames), displacement methods, and gain an introduction to energy methods.

Prerequisites: ENGS 203 and MATH 162, or permission from the instructor.

CIVL 304 REINFORCED CONCRETE DESIGN

Spring, 3 credit hour(s)

Students will gain a foundational understanding of analysis and design procedures in accordance with ACI code standards for reinforced concrete members subjected to bending, shear, and axial loads. They will develop the ability to design rectangular and T-beams for flexure and shear, as well as slabs for flexure and short columns for axial loads. Students will also acquire knowledge of strength design concepts and learn to assess serviceability conditions, including cracking and deflections, for reinforced concrete beams and one-way slabs.

Prerequisites: CIVL 303 and CIVL 213, or permission of instructor.

CIVL 305 NON-METALLIC CONCRETE DESIGN

Spring, 3 credit hour(s)

The course on Concrete Structure with GLASS Fiber-Reinforced Polymers (GFRP) offers a comprehensive exploration of the utilization of FRP materials in engineering applications.

Through a structured curriculum, students will explore the material properties, analysis techniques, and design principles associated with FRP-based structural elements. This course is designed to equip students with the knowledge and skills necessary to effectively incorporate FRP materials into the design and construction of resilient and efficient structures.

Prerequisites: CIVL 303 and CIVL 213, or permission from the instructor.

CIVL 306 TIMBER DESIGN

Spring, 3 credit hour(s)

The dimensional features, structural properties and behavior under load of wooden structural members are presented. Students learn standard methods for the analysis and design of timber-framed structural elements including beams, joists, rafters, posts (columns), braces, gussets and fasteners. Load and Resistance Factor Design and Allowable Strength Design are employed. Use and selection of engineered lumber products such as glu-lams and laminated veneer lumber is included.

Prerequisites: CIVL 303, or permission from the instructor.

CIVL 307 STRUCTURAL STEEL DESIGN

Fall, 3 credit hour(s)

In this course, students will learn how to design steel members, connections, and simple structures. They will be introduced to the basics of Load and Resistance Factor Design (LRFD) and will understand how to design tension members, beams, and columns. Students will also gain practical skills in designing bolted and welded connections, preparing them to handle real-world engineering tasks.

Prerequisites: CIVL 303, or permission from the instructor.

CIVL 312 PAVEMENT DESIGN AND ANALYSIS

Spring, credit hour(s)

This course covers the structural design of flexible and rigid pavements. Considerations include traffic and environmental conditions, performance measures and failure mechanisms, surface characteristics, joints, and drainage.

Prerequisites: CONS 280 or permission of the instructor

CIVL 313 HIGHWAY AND TRANSPORTATION DESIGN

Fall, 3 credit hour(s)

This course covers the design of horizontal and vertical highway alignments in accordance with American Association of State Highway and Transportation Officials (AASHTO) requirements from survey data, topographic maps and traffic data. Analysis of alternate plans using benefit cost ratios based on road user costs and first costs are included. Setting of traffic light timing for optimum traffic flow and design of parking is introduced.

Prerequisites: CONS 101 or permission of instructor.

CIVL 314 SOIL MECHANICS

Spring, 4 credit hour(s)

Students initially learn about soil types, soil properties, and basic soil property tests. This knowledge and testing results are used to classify soils. The remainder of the course covers advanced topics in soil mechanics.

The methods of compaction, consolidation, and settlement of soil are discussed. Students learn about soil and slope stabilization techniques and design. Soil-supported foundations for buildings and structures are discussed, which include different founda-

Course Descriptions: Civil Engineering

tion types, design methods and considerations, and installation criteria and methods. Students learn about lateral earth pressures and design of retaining structures. Methods and safety precautions for excavations are also covered. The laboratory component of the course explores soil testing methods and analytical design problems related to lecture topics. This is a writing intensive course.

Prerequisites: ENGS 203 or permission of instructor.

CIVL 316 FOUNDATION DESIGN *Fall, 3 credit hour(s)*

Students apply theory and concepts of soil mechanics to foundation design. Soil-supported foundations for buildings and structures are discussed, which include different foundation types, design methods, design considerations and criteria, and installation techniques. Students learn to design shallow foundations, deep pile and drilled shaft foundations, and retaining structures. Theory and practice of slope stability are taught.

Prerequisites: CIVL 314 and ENGS 203, or permission of instructor.

CIVL 317 FLUID MECHANICS LAB *Fall, 1 credit hour(s)*

This laboratory course will provide experiential supplements to the Fluid Mechanics I lecture, ENGS 315, and experiential and computational activities which will demonstrate and investigate practical applications of fluid mechanics theories in the Civil Engineering realm.

Prerequisites: None. Co-requisites: ENGS 315

CIVL 321 FLUID MECHANICS AND HYDROLOGICS *Spring, 4 credit hour(s)*

Concepts and theory of fluid mechanics and their application to civil engineering and design are presented. The course focuses on water as the fluid, fluid mechanics theory and concepts that relate to civil engineering, and civil engineering hydraulics. Fluid mechanics, hydrostatics, and hydrodynamics related topics include: fluid properties, buoyancy, hydrostatic pressure, resultant force and center of pressure on submerged surfaces, motion of water and types of flow, energy head and conservation laws, measuring flow and hydraulic devices. Fundamental concepts and theory of hydraulics include open channel flow, application of continuity equation to flow in a closed conduit, use of Manning's equation for determining channel, pipe, and stream flow, examination of varied flow and determination of backwater profiles, use of rational method in determination of peak discharge, and determination of drainage area and time of concentration.

Students will learn theory and concepts of hydraulic design in order to design culverts, storm sewers, and stormwater detention systems.

Prerequisites: ENGS 201 or permission of instructor.

CIVL 322 HYDROLOGY AND HYDROGEOLOGY *Fall, 4 credit hour(s)*

This course includes the study of surface and groundwater systems, with an emphasis on civil and environmental engineering related topics. Surface water topics include: principles of hydrology, hydrologic cycle, surface water environments, surface

water flow, flood hazard analysis, watershed management and river engineering, and drainage basins. Specific groundwater topics include: principles of hydrogeology, aquifers, aquitards, groundwater flow regimes, well construction and testing, porosity and permeability of earth materials, and aquifer property testing and analysis.

Laboratory and field exercises are used to introduce students to technologies and analytical methods used by industry to understand surface and groundwater systems.

Prerequisites: CIVL 384 or ESCI 107 or CIVL 314, or permission of instructor.

CIVL 323 ENVIRONMENTAL ENGINEERING *Fall, 4 credit hour(s)*

This course introduces students to environmental engineering. Course content expands upon concepts of basic chemistry to study areas of aqueous chemistry, wastewater, solid waste, and air pollution. Students expand their knowledge in chemistry with study of equilibrium chemistry concepts and problems. Specific topics include the physical, chemical, and biological characteristics of water and the significance and interpretations of water quality properties. The impact of metal redox reactions and agricultural runoff on metal, nutrient, and solids loading in surface water bodies is tested and evaluated.

Characterization, transport, and management of solid waste and air quality pollutants is studied. Environmental and engineered systems are modeled in order to study mass balance, contaminant fate, and reaction kinetics. Concepts of risk assessment are also introduced. Laboratory sessions use standard water quality testing practices that are currently used in industry.

Prerequisites: CHEM 150 and MATH 161, or permission of instructor.

CIVL 324 WATER AND WASTEWATER TREATMENT DESIGN *Spring, 3 credit hour(s)*

The treatment of water and wastewater is necessary to achieve the required quality necessary for a desired end-use. This course explores different chemical, physical, and biological theory, concepts, and methods of treatment for municipal water and wastewater treatment facilities. Students learn design concepts and system operations for water and wastewater treatment plants and apply this knowledge to design components of these treatment facilities.

There is also discussion of related water and wastewater quality standards and regulations. Laboratory sessions demonstrate standard water and wastewater treatment practices that are currently used in industry, utilize bench-scale tests to optimize treatment, and allow students to design components and systems.

Prerequisites: CHEM 150 and MATH 161, or permission of instructor.

CIVL 326 STEEL BRIDGE DESIGN *Spring, 3 credit hour(s)*

Students are challenged to an inter-collegiate bridge building competition that includes design, fabrication, and construction. Participating students gain practical experience in concept design, structural design, fabrication processes, construction planning, organization, and teamwork. Students

will design and make preparations for construction of an approximately 21-foot long steel bridge that is both light and strong, and capable of supporting about 2,500 pounds. The class will use their bridge design to represent SUNY Canton's entry in the Regional competition. This class will design the bridge using advanced structural analysis software (e.g. SAP 2000), produce shop drawing in AutoCAD, and prepare material bill to ensure an effective design and construction of steel bridge.

Depending on the students' background and course work they will be tasked with varying components of this overall project.

Prerequisites: ENGS 101 or permission of instructor

CIVL 330 CONSTRUCTION MANAGEMENT, ESTIMATING, AND SCHEDULING *Spring, 3 credit hour(s)*

Construction engineering fundamentals that relate to civil engineering are studied in this course. Topics include: construction management practices, estimating for construction projects, and planning and CPM (critical path method) scheduling methods and field operations. Blueprint reading will be incorporated to better familiarize civil engineering students with building layout and materials. Estimating the costs of construction will be introduced, focusing on quantity take-off from construction plans and introducing unit pricing of labor, materials, and assemblies. Case studies are employed to assist students with understanding complex problems that arise during the management and administration of complex projects.

Prerequisites: ENGS 101 or permission of instructor.

CIVL 339 STRUCTURAL ANALYSIS LAB *Spring, 1 credit hour(s)*

Students in this class will apply structural analysis software to perform a 3D frame structure analysis.

Prerequisites: CONS 336 Structural Analysis, or permission from the instructor

CIVL 381 INTRODUCTION TO ARCHITECTURAL ENGINEERING *Fall, 3 credit hour(s)*

This course introduces the functional parts and systems that make up a building as well as their interactions in delivering required sustainable and resilient performance.

There is a general overview of professional design services and documents of architecture and engineering disciplines that encompasses foundations, structures, building enclosures, heating and air conditioning, electrical, plumbing and fire safety systems. Concepts of building performance and aspects of pertinent building codes and standards are also discussed. This course incorporates basic principles of building science, green construction, and professional ethics.

Prerequisites: CONS 272 Strength of Materials for Technicians or ENGS 203 Engineering Strength of Materials, or permission from the instructor

CIVL 384 ENGINEERING GEOLOGY *Spring, 4 credit hour(s)*

This course introduces engineers to earth pro-

Course Descriptions: Civil Engineering, Construction Mgmt.

cesses and phenomena that impact the design, construction, and performance of engineered structures. Students learn to identify common earth materials, study the mechanical properties of rocks, and learn how earth materials respond to stress and strain resulting from natural forces and engineered structures. The impact of weather, erosion, landforms, structural deformation, earthquakes, and coastal processes on engineered structures are studied. The natural stability of slopes and mass movement hazards that impact the design and construction of structures are discussed. Additional topics include, but are not limited to: the development and composition of earth, geologic time, geologic mapping, an introduction to soil mechanics, and an introduction to surface water and groundwater principles.

Laboratory exercises reinforce lecture material; and provide students with skills required by field engineers.

Prerequisites: MATH 121 (College Algebra), MATH 123 (Pre-Calculus), or MATH 135 (Technical Math I), or permission of the instructor.

CIVL 403 MATRIX METHODS OF STRUCTURAL ANALYSIS

Fall, 3 credit hour(s)

This course covers the formulation of truss, beam, and frame analysis using the stiffness method within matrix structural analysis. It includes the development of element properties, coordinate transformations, and the theory of global analysis. Special topics such as initial loads, member and joint constraints, and modification procedures are also explored.

Prerequisites: CIVL 303 or permission of instructor.

CIVL 404 ADVANCED REINFORCED CONCRETE DESIGN

Fall, 3 credit hour(s)

Students will gain advanced knowledge in the design of footings, retaining walls, two-way floor slabs, slender columns, and shear friction. They will also develop expertise in the concepts of anchorage and development length, equipping them with the skills necessary to handle a variety of structural design challenges.

Prerequisites: CIVL 304 or permission of instructor.

CIVL 421 ADVANCED HYDROLOGICS

Spring, 3 credit hour(s)

This course examines advanced topics of hydraulics, building upon theory and design concepts presented in Fluid Mechanics and Hydraulics. Students will learn additional theory, practice, and operation of storm sewer systems and detention systems in order to design more complex water management systems. Flood routing and spillways will also be examined and designed. Pump theory and design will be introduced, along with design of pipe distribution systems. Students will be introduced to coastal engineering concepts and practice. Sediment transport and accumulation will be studied in both river and coastal systems, along with impacts and procedure associated with decommissioning of dams and similar structures. The impact of climate change on natural processes and engineered systems will be discussed.

Prerequisites: CIVL 321 and CIVL 322, or permission of instructor.

CIVL 424 SOIL AND GROUNDWATER REMEDIATION

Fall, 3 credit hour(s)

Students learn about the different types and characteristics of soil and groundwater contaminants. Theory and concepts of contaminant fate and transport are reviewed. Remedial methods and technologies for soil and groundwater contamination are examined. There is review and discussion of federal and state guidance, regulations, and other pertinent legislation that relates to site assessment and remediation.

Prerequisites: CIVL 323 or CIVL 322 or CIVL 324, or permission of instructor.

CIVL 476 PRE-CAPSTONE

Fall, 1 credit hour(s)

This course provides a learning experience that allows a student to review technical literature and propose a related project. This could be a study of a problem and solution, a new project design, improvement of a design, testing and experimentation, assessment, or a number of other project concepts. Over the course of the semester students will work with faculty to propose a project that they will work on in the following semester as their capstone project. All projects must be approved by course faculty.

Prerequisites: Completion of at least 5 semesters in the Civil Engineering 4-yr program, or approval by the faculty member.

CIVL 477 CAPSTONE

Spring, 3 credit hour(s)

This course provides a learning experience that allows a student to propose, design, and implement a project. This could be a study of a problem and solution of specific equipment, new project design, improvement of an existing product, and many others. All projects must be approved by course faculty.

Prerequisites: CONS 476 Pre-Capstone, or permission of the instructor.

CIVL 480 CO-OP IN CIVIL AND ENVIRONMENTAL ENGINEERING TECHNOLOGY

Fall/Spring, 3 credit hour(s)

This course provides students with an opportunity to receive program credit for real world learning experience through internship placement with a private/public organization in a field related to the student's degree, academic objectives, and career goals. This course requires students to have an active position that requires them to apply knowledge already obtained in their degree program and/or expand their knowledge and skills in the civil and/or environmental engineering technology industries.

Prerequisites: 45 earned credits, consent of academic advisor, and approval by the Dean of CSOET

CMGT 100 INTRODUCTION TO CONSTRUCTION MANAGEMENT

Fall, 3 credit hour(s)

This course is an introduction to concepts/terminology in the construction industry, business aspects of running a construction project, communication methods in construction, career planning and options for a career in Construction Management, project management protocols, ethical issues in construction, job site conduct protocol and other attributes of working in the construction industry. In

class exercises and assignments emphasize teamwork skills, time management, communication skills, development of properly formatted deliverables, and basic problem solving eg. unit conversions, area and volume calculations plus critical thinking skills.

Prerequisites: MATH 123 Pre-Calculus or higher, or permission of the instructor

CMGT 200 BUILDING CODES & COMMERCIAL PRINT READING

Spring, 3 credit hour(s)

This course reviews the structure of building codes and the way that they are enforced. Students learn about the origin of codes and how they have changed over time, from early fire codes to today's green codes. It also provides more specific information on ICC's (International Code Council) family of codes and the consensus code development process used to create and update them. The construction related print reading portion of the course is designed to assist students in reading and understanding commercial prints. Students learn how to navigate efficiently through a complex set of commercial prints, interpret symbols, read schedules, learn abbreviations, and use plans to work on construction related projects for all of the various trades in a commercial building.

CMGT 300 CONSTRUCTION MANAGEMENT

Spring, 3 credit hour(s)

Construction management fundamentals and their applications to the conduct of a construction business will be studied in this course. Topics include: estimating for the construction manager, CPM (critical path method) scheduling methods and expediting field operations, material management and jobsite laydown. Case studies are employed to assist students with understanding complex problems that arise during the management and administration of complex projects.

Prerequisites: 45 credits or more, or permission of the instructor

CMGT 301 SCHEDULING AND PLANNING

Fall, 4 credit hour(s)

Construction management fundamentals and their applications to the conduct of a construction business will be studied in this course. Topics include: estimating for the construction manager, CPM (critical path method) scheduling methods and expediting field operations, material management and jobsite laydown. Case studies are employed to assist students with understanding complex problems that arise during the management and administration of complex projects.

Prerequisites: CMGT 300 or ENGS 101; and CMGT 322 or CONS 222; or permission of the instructor

CMGT 304 LIGHT CONSTRUCTION

Fall, 3 credit hour(s)

This course introduces the materials, construction and design considerations typically employed in residential and commercial buildings. Topics include: site considerations, foundations, wall systems, roof systems and finish systems. Materials include soils, concrete, masonry, wood and steel. The course is intended for students who did not take CONS 111 and CONS 112.

Prerequisites: ENGS 101 or CMGT 100 or CMGT 300, or permission of the instructor

Course Descriptions: Construction Mgmt.

CMGT 305 HEAVY CONSTRUCTION *Spring, 3 credit hour(s)*

This course introduces students to construction equipment operating characteristics, economics, and production rate estimation. Heavy construction methods and procedures associated with excavation, hauling equipment, aggregate production, and mass earthwork operations are reviewed.

Prerequisites: ENGS 101 or CMGT 100 or CMGT 300, or permission of the instructor

CMGT 308 RENEWABLE AND SUSTAINABLE MATERIALS *Spring, 3 credit hour(s)*

This course examines renewable and sustainable materials being used today in the construction industry. Students learn about the history and evolution of materials used in construction; and about the new sustainable materials available in today's market (types of materials, material application and selection, material performance, installation, service life, and maintenance). Students learn how to conduct cost-benefit analysis on different renewable and sustainable materials when deciding whether to use these materials in a project. Sourcing and planning for these materials is reviewed. Additional topics are: sustainable building design using green materials and methods and technologies for construction of sustainable transportation systems, including roads, bridges, tunnels, and hardscapes, as well as water, storm, and wastewater systems.

Prerequisites: CMGT 371 or CONS 272 or ENGS 203, or permission of the instructor

CMGT 314 SOILS IN CONSTRUCTION *Spring, 3 credit hour(s)*

Students learn about soil types, soil properties, soil classification, basic soil property tests, how to conduct site and subsurface investigations. Introductory concepts of hydrogeology are introduced, students learn to measure and calculate hydraulic conductivity, and site dewatering techniques are discussed. Other site work related topics include: the compaction control process, slope stability and erosion control, excavation safety and support systems, and roadway subgrade materials and testing; types of shallow foundations, deep foundations, and retaining structures and aspects of their construction as related to soil work.

Prerequisites: MATH123 or permission of instructor. Co-requisites: CMGT 315

CMGT 315 SOILS IN CONSTRUCTION LAB *Spring, 1 credit hour(s)*

Students learn about soil types, soil properties, soil classification, and basic soil property tests in applied laboratory sessions, soil testing methods and solve analytical problems. Students learn and practice basic reporting styles used in industry. If a student has obtained their ACI (American Concrete Institute) certifications in aggregate testing (Aggregate Testing Technician - Level 1 certification) and aggregate/soils base testing (Aggregate/Soils Base Testing Technician certification) and can provide formal certifications, they can receive content credit for this course.

Prerequisites: CMGT 314 or permission of instructor

CMGT 322 COMMERCIAL ESTIMATING I *Spring, 3 credit hour(s)*

In this course students will be introduced to estimating the costs of construction with a focus primarily on quantity take-off from construction plans. Student are also introduced to unit pricing of labor and material, assemblies and square foot estimates, and computer-assisted estimating.

Prerequisites: Have earned 45 credits, or permission of instructor

CMGT 323 COMMERCIAL ESTIMATING II *Fall, 3 credit hour(s)*

The student who is already familiar with estimating is challenged to perform more sophisticated work. Electronic Takeoff and Pricing software is employed extensively in the estimate of costs for complex commercial projects. In addition to material, labor and equipment, estimation of indirect costs are included. A large scale estimating project is required as part of this course.

Prerequisites: CMGT 322 or permission of instructor

CMGT 380 CONSTRUCTION MATERIALS *Fall, 2 credit hour(s)*

This course provides students with an opportunity to receive program credit for real world learning experience through internship placement with a private/public organization in a field related to the student's degree, academic objectives, and career goals. This course requires students to have an active position that requires them to apply knowledge already obtained in their degree program and/or expand their knowledge and skills in the construction industry.

Prerequisites: MATH123 or higher and 15 credits earned, or permission of instructor. Co-requisites: CMGT 381

CMGT 381 CONSTRUCTION MATERIALS LAB *Fall, 1 credit hour(s)*

This laboratory course develops awareness with and expertise in conducting standardized field and laboratory tests on common civil engineering materials. The materials studied include aggregates and Portland cement concrete. Several concrete mix designs will be prepared and tested for fresh and hardened concrete properties.

Students learn to analyze and interpret laboratory test data. If a student has obtained their ACI (American Concrete Institute) certifications in concrete field testing (Concrete Field Testing Technician - Grade I certification) and concrete laboratory testing (Concrete Lab Testing Technician -Level 1 certification and Concrete Strength Testing Technician certification), can provide formal certifications, and can receive content credit for this course.

Prerequisites: CMGT 380 or permission of instructor

CMGT 389 CONSTRUCTION CONTRACTS AND LAW *Fall, 3 credit hour(s)*

Legal aspects associated with the conduct of a construction project are investigated in this course. Topics include: risk and liability to the owner and general contractor under various delivery methods,

typical provisions of a contract, public-owner laws, assignment of responsibility for change orders, bonding and insurance, and the effect of unethical practices on the contract award process. Case studies are employed to illustrate concepts.

Prerequisites: 45 credits or more and CONS 274 or CMGT 300, or permission of instructor

CMGT 403 OPERATIONS MANAGEMENT *Spring, 3 credit hour(s)*

This course provides an introduction to operations management (OM) specific to a construction organization. This course aims to familiarize students with the major operational issues that confront construction managers including efficient planning of the work, productivity, materials management and quality issues. Case studies provide examples of successful OM practices and pitfalls of poor OM.

Prerequisites: CMGT 300 or CONS 274, and CMGT 301, or permission of the instructor

CMGT 406 VALUE ENGINEERING *Fall, 3 credit hour(s)*

This course introduces students to value engineering (VE). Students learn the VE methodology, its role in the decision-making process, and application on construction projects. Students use VE tools in project-based decision making. Students also learn how to analyze projects and lower costs using the VE method.

Prerequisites: CMGT 300 or ENGS 101 and CMGT 322 or CONS 222, or permission of the instructor

CMGT 410 CONSTRUCTION LAYOUT *Spring, 3 credit hour(s)*

Site layout is an integral part of all construction projects and can have a significant impact on time, money, and construction efficiency. Students learn how to apply their skills in surveying, print reading, and construction management to develop and manage a site layout for each phase of a construction project. Students learn how to lay out the location of structures and other features on the site, check dimensions of structures as they are built, document completed work, and verify that the project is progressing in accordance to the design plans and specifications.

Prerequisites: CONS 203, CMGT 200, and CMGT 300, or permission of the instructor

CMGT 480 INTERNSHIP IN CONSTRUCTION MANAGEMENT *Fall/Spring, 1 credit hour(s)*

This course provides students with an opportunity to receive program credit for real world learning experience through internship placement with a private/public organization in a field related to the student's degree, academic objectives, and career goals. This course requires students to have an active position that requires them to apply knowledge already obtained in their degree program and/or expand their knowledge and skills in the construction industry.

Prerequisites: 45 earned credits, consent of academic advisor, and approval by the Dean of CSOET

Course Descriptions: Civil/Construction

CONS 101 ELEMENTARY SURVEYING *Fall, 4 credit hour(s)*

Course consists of both lecture and laboratory periods. Lectures include the developmental history of the surveying profession, along with the underlying principles of basic theory and practice. Realistic exercises involving linear and angular measurements, leveling, field-book recording, construction layout, and traversing are performed in the outside laboratory. Computation of errors, adjustments for instrument misalignment and weather are included in the laboratory exercises. Conversion of measurements and use of the Metric (S.I.) system is also included. Students have ample opportunity for hands-on training with the extensive variety of equipment utilized in the course. Field parties of limited size offer one on one instruction opportunity.

Prerequisites: MATH 106 or concurrent enrollment in MATH 121, plus a beginning physics course, or permission of instructor.

CONS 111 COMMERCIAL STRUCTURES *Spring, 3 credit hour(s)*

The study of construction materials, practices, equipment and terminology used in commercial construction. Lectures and laboratory periods develop theory and practice in excavation; foundation formwork; masonry walls; concrete; erection of steel frame buildings; commercial wall and roof systems; and interior and exterior wall finishes. Field trips to be arranged when practical.

CONS 112 WOOD STRUCTURES *Fall, 3 credit hour(s)*

The study of construction materials, practices, equipment and terminology used in buildings requiring wood framing.

Lectures and laboratory periods develop theory and practice in layout and assembly of wood framing of floors, walls, roofs and trusses, and siding materials. Construction of a 2-stall garage and/or small storage shed will serve as an application of wood framing and exterior finish fundamentals. Students will perform an individual research project with a written report. One or more field trips will be arranged.

CONS 132 CONSTRUCTION DRAFTING *Spring, 3 credit hour(s)*

An introduction to the fundamental principles of engineering and architectural drafting and to the basic idea that all people involved in engineering/Architecture and/or construction will communicate with CADD drawings of some nature. The student will demonstrate a basic understanding of orthographic projection, perspective and isometric views, descriptive geometry, good CAD practices. A variety of construction prints will be utilized to create the ability to deal with all varieties of drawings commonly emanating from architectural engineering firms and those found on construction job sites.

Throughout the course, CAD concepts are reinforced through the use of AutoCAD and software.

CONS 151 BUILDING TRADES - BLUEPRINT READING AND DRAFTING *Fall, 2 credit hour(s)*

Instruction includes understanding the funda-

mental concepts in freehand sketching and instrument drawing needed for communication in the construction industry. Orthographic projection, pictorials and perspective drawing techniques will be introduced. A variety of drawings will be studied in order to become familiar with information contained on them and how they are interpreted.

CERTIFICATE/AAS ELECTIVE CREDIT ONLY. One hour lecture, two hours laboratory per week.

CONS 172 TECHNICAL STATICS *Fall/Spring, 3 credit hour(s)*

The course provides application of Newton's First and Third Laws of motion in the force analysis of statically determinate structures such as pinned connections, trusses, beams, frames, and cables. The determination of centroids and moment of inertia is also covered. The course requires extensive application of geometry, trigonometry and algebra. The course provides fundamentals that are used in strength of materials and structural analysis.

Prerequisites: MATH 123 (Pre-Calculus) and PHYS 121 (College Physics I); More advanced MATH or PHYS may be substituted.

CONS 203 ADVANCED SURVEYING *Fall, 3 credit hour(s)*

This course emphasizes fundamentals of field and office procedures used in the construction industry. Major topics covered are: mapping procedures, topographic survey methods, area determinations by coordinates, determination of volumes for earthworks, horizontal and vertical control necessary for mapping and building layout, horizontal (circular) curves, vertical (parabolic) curves, and principles of boundary surveying. The student uses modern surveying equipment in field sessions, including total stations, automatic levels and lasers, geographic positioning satellite receivers and integrated mapping and surveying software for data analysis and map compilation.

Prerequisites: CONS 101 and SOET 116 or SOET 115, or permission of instructor.

CONS 216 SOILS IN CONSTRUCTION *Fall, 4 credit hour(s)*

Students learn about soil types, soil properties, soil classification, and basic soil property tests. Students learn how to conduct site and subsurface investigations. Introductory concepts of hydrogeology are introduced, students learn to measure and calculate hydraulic conductivity, and site dewatering techniques are discussed. Other site work related topics include: the compaction control process, slope stability and erosion control, excavation safety and support systems, and roadway subgrades materials and testing. Students learn about types of shallow foundations, deep foundations, and retaining structures and aspects of their construction as relate to soil work. The laboratory component of the course explores soil testing methods and analytical problems related to lecture topics. Students learn and practice basic reporting styles used in industry.

Prerequisites: MATH 121, MATH 123, or MATH 135, and sophomore status, or permission of the instructor.

CONS 222 CONSTRUCTION ESTIMATING *Fall, 2 credit hour(s)*

An introduction to estimating the costs of construction. Includes quantity take-off from construction plans, unit pricing of labor, material, and equipment, and extensions based on unit prices derived from industry accepted resources such as RS Means and Timberline. The CSI Master format is introduced as a method of approach and organization.

Prerequisites: MATH 106 or MATH 135 and SOET 101, or ENGS 101, or CITA 108, or permission of the instructor.

CONS 226 BRIDGE BUILDING *Fall, 1 credit hour(s)*

Students are challenged to an inter-collegiate bridge building competition that includes design, fabrication, and construction. Participating students gain practical experience in structural design, fabrication processes, construction planning, organization, and teamwork.

Students will essentially design and construct a 21-foot long steel bridge that is both light and strong, and capable of supporting 2,500 pounds. The class will use their bridge design to represent SUNY Canton's entry in the Regional competition.

Prerequisites: Enrollment in a Canino School of Engineering Technology program or permission of the instructor.

CONS 233 STRUCTURAL DRAFTING *Spring, 3 credit hour(s)*

An introduction to the preparation of drawings typically used in the structural design industry. The greatest emphasis is on the creation of structural steel details.

Detailing of timber and reinforced concrete structures will also be presented and performed. The lab work engages the student with "AutoCad Revit" for structures. Building Information Modeling (BIM) is introduced. Some structural design is required.

Prerequisites: SOET 116 and (CONS 272 or ENGS 203), or permission of instructor.

CONS 272 STRENGTH OF MATERIALS FOR TECHNICIANS *Fall, 3 credit hour(s)*

The concepts of stress and strain are introduced and, in combination with statics principles, are used in the analysis of structural elements. Material properties such as ultimate strength, yield strength, elastic modulus, shear strength, torsional strength, and compressive strength are investigated using physical testing. The process of selecting structural elements such as pins, bolts, tension members, compression members, beams and shafts based on strength and factor of safety is presented and practiced.

Prerequisites: A grade of C or better in CONS 172 (Technical Statics) or ENGS 201 (Statics), MATH 161 (Calculus 1)

CONS 274 CONSTRUCTION MANAGEMENT *Spring, 3 credit hour(s)*

Construction management fundamentals and their applications to the conduct of a construction business. Construction estimating, scheduling (using CPM), production rate calculations and construction contract issues are studied.

Course Descriptions: Civil/Construction

CONS 275 **STRENGTH OF MATERIALS LAB** *Spring, 1 credit hour(s)*

This course supplements the material presented in strength of materials, by providing laboratory tests, hands-on projects and practical applications. The course also introduces new and basic topics related to structural analysis. Engineering materials to be worked with include steel, aluminum, concrete, timber, and composite materials. Topics will include: tension test, compression test, bending test, deflection test, elastic plate test under uniformly distributed area load, dead load, live load, and snow load calculations.

Prerequisites: CONS 272 Strength of Materials OR ENGS 203 Engineering Strength of Materials - Corequisites: May be taken coincident with CONS 272 or ENGS 203

CONS 280 **CIVIL ENGINEERING MATERIALS** *Fall, 3 credit hour(s)*

This course examines properties, common applications and methods for properly selecting the materials typically used in the constructed environment. The laboratory develops awareness with and expertise in conducting standardized field and laboratory testing on common civil engineering materials. The materials studied include aggregates, Portland cement concrete, masonry and asphalt.

Prerequisites: MATH 121 or MATH 123, or MATH 135

CONS 304 **REINFORCED CONCRETE DESIGN** *Spring, 3 credit hour(s)*

In this course, the fundamentals of cast-in-place reinforced concrete design by the strength design method are introduced. Students design slabs, beams, girders, columns and footings in accordance with current version of American Concrete Institute Code 318. Computations are done by manual methods and spreadsheets. Students are introduced to design software. In the lab, students work through the complete design of a small multi-story commercial building.

Prerequisites: CONS 336 and CONS 280.

Co-requisites: CIVL 339

CONS 316 **FOUNDATION DESIGN** *Spring, 3 credit hour(s)*

Principles of soil mechanics are taught: stress distribution, consolidation and settlement, shear strength, and lateral earth pressure. Students apply concepts of soil mechanics to foundation design. Soil-supported foundations for buildings and structures are discussed, which include different foundation types, design methods, design considerations and criteria, and installation techniques. Students learn about shallow foundations, deep pile and drilled shaft foundations, retaining structures, and slope stability.

Prerequisites: CONS 216 and (CONS 272 or ENGS 203), or permission of instructor

CONS 322 **HYDRAULICS** *Spring, 4 credit hour(s)*

The basics of fluid mechanics and their application to civil engineering technology are considered. The course focuses on water as the fluid. Major topic areas covered are: fluid properties, buoyancy,

hydrostatic pressure, resultant force and center of pressure on submerged surfaces, application of the continuity equation to flow in a closed conduit, pressure measurement, flow measurement and flow control in open channels, use of the rational method in determination of peak discharge and storm sewer design.

Prerequisites: CONS 172 or ENGS 201 (Statics) or permission of instructor.

CONS 324 **STRUCTURAL STEEL DESIGN** *Spring, 3 credit hour(s)*

An introduction to the theory, analysis and design of the elements that comprise structural steel buildings. Instruction follows the specifications and selection techniques provided in the American Institute of Steel Construction (AISC) Manual of Steel Construction. Subject areas include determination of controlling load combinations, analysis and selection of tension members, analysis and selection of flexural members, analysis and selection of compression members, fastener strength and connection design and combined bending and axial stresses (beam-columns).

Prerequisites: CONS 336. Co-requisites: CIVL 339

CONS 336 **STRUCTURAL ANALYSIS** *Fall, 3 credit hour(s)*

The course analyzes statically determinate and indeterminate structures. Additional topics of influence lines, moving loads, member forces and stresses, deflections, flexibility and stiffness analyses are explored using computer applications.

Prerequisites: C or better in CONS 272 (Strength of Materials for Technicians) or ENGS 203 (Engineering Strength of Materials); and MATH 162 (Calculus II)

CONS 338 **ADVANCED MECHANICS OF MATERIALS** *Spring, 3 credit hour(s)*

This course is an analysis of statically indeterminate structures and deflections using the principle of virtual work. Special topics in stress analysis such as internal loads due to temperature, torsion, unsymmetrical bending circumferential stresses, buckling and beams on an elastic foundation are included. The finite element method is introduced. Three lecture hours per week.

Prerequisites: Structural Analysis II (CONS 336) or permission of the instructor.

CONS 350 **INTRODUCTION TO** **GEOGRAPHIC INFORMATION SYSTEMS**

Spring, 3 credit hour(s)

The course introduces students to GIS terminology, the concept of relational databases, spatial data models, topology, raster data and vector data. Data entry methods, including quality control and metadata are discussed. The student is introduced to spatial analysis applications including terrain analysis, data manipulation and visualization. Students apply knowledge in the laboratory using GIS software.

Prerequisites: Intermediate Spreadsheets (CITA 109) junior status, or permission of the instructor.

CONS 366 **STRUCTURAL STEEL DETAILING,** *Fall, 3 credit hour(s)*

An acquaintance with the properties, dimensions, and characteristics of present day shapes and forms is achieved by making detail and erection drawings reflecting present day fabrication and erection procedures for structural steel. Mill practices, tolerances, and billings are considered. Proper drafting techniques are observed. Selection and detailing of beams, girders, columns, and connections is carried out. Drawing prints of columns and connections are carried out. Drawing prints are made for checking purposes from the pencil drawings. The AISC handbook is used extensively as a reference.

Prerequisites: Structural Steel Design (CONS 324), Computer Drafting (SOET 116), or permission of instructor.

CONS 368 **BUILDING ELECTRICAL &** **MECHANICAL SYSTEMS** *Fall/Spring, 3 credit hour(s)*

An introduction to the major components that comprise the electrical and mechanical (HVAC) systems in a commercial building. Students study and interpret construction plans associated with these systems. Water supply, waste, drain and vent calculations are performed. Students are required to perform heat and energy calculations. Issues that impact building environmental health and indoor air quality are presented. Alternative energy approaches to heating, cooling and providing power to buildings are introduced.

Prerequisites: College Algebra (MATH 121) or permission of instructor.

CONS 370 **TIMBER DESIGN** *Spring, 3 credit hour(s)*

The dimensional features, structural properties and behavior under load of wooden structural members are presented. Students learn standard methods for the analysis and design of timber-framed structural elements including beams, joists, rafters, posts (columns), braces, gussets and fasteners. Load and Resistance Factor Design and Allowable Strength Design are employed. Use and selection of engineered lumber products such as glu-lams and laminated veneer lumber is included.

Prerequisites: CONS 336 - Co-requisites: CIVL 339

CONS 372 **HIGHWAYS AND TRANSPORTATION** *Fall, 3 credit hour(s)*

This course covers the design of horizontal and vertical highway alignments in accordance with American Association of State Highway and Transportation Officials (AASHTO) requirements from survey data, topographic maps and traffic data. Analysis of alternate plans using benefit cost ratios based on road user costs and first costs are included. Setting of traffic light timing for optimum traffic flow and design of parking is introduced.

Prerequisites: CONS 101

CONS 375 **STRUCTURAL ENGINEERING DESIGN** *Spring, 3 credit hour(s)*

This course is an introduction to the design of structural steel, reinforced concrete, wood. This course is taught on the basis of statically determinate

Course Descriptions: Civil/Construction, Cybersecurity

structures. Students are introduced to the Load and Resistance Factor (LRFD) and Allowable Stress Design (ASD). Analysis and selection of tension members, columns and beams is incorporated.

Prerequisites: CONS 272 and CONS 280

CONS 385 HYDROLOGY AND HYDROGEOLOGY *Fall, 4 credit hour(s)*

This course includes the study of surface and groundwater systems, with an emphasis on civil and environmental engineering related topics. Surface water topics include: principles of hydrology, hydrologic cycle, surface water environments, surface water flow, mass transport, flood hazard analysis, and drainage basins. Specific groundwater topics include: principles of hydrogeology, aquifers, aquitards, groundwater flow regimes and modeling, well construction and testing, porosity and permeability of earth materials, and aquifer property and testing and analysis. Laboratory and field exercises are used to introduce students to technologies and analytical methods used by industry to understand surface and groundwater systems.

Prerequisites: CONS 285, CONS 280, CONS 216; and MATH 122 or MATH 161; or permission of the instructor

CONS 386 WATER QUALITY *Fall, 4 credit hour(s)*

Water is one of Earth's most valuable resources. The quality of water is essential to human health, the environment, and industrial/engineering use. This course provides students with the knowledge to determine the quality of water and how it is impacted by contaminants. Course content expands upon concepts of basic chemistry to study areas of aqueous chemistry that relate to water quality analysis. Specific topics include the physical, chemical, and biological characteristics of water and the significance and interpretations of water quality properties. The fate of contaminants in natural and engineered environments are studied. Environmental and engineered systems are modeled in order to study contaminant fate and reaction kinetics. Laboratory sessions use standard water quality testing practices that are currently used in industry.

Prerequisites: MATH 161, CHEM 150, or permission of the instructor.

CONS 387 WATER AND WASTEWATER TREATMENT TECHNOLOGIES *Spring, 3 credit hour(s)*

The treatment of water is necessary to achieve the required quality necessary for a desired end-use. End-use may include, but is not limited to, drinking water, medical use, and industrial use. The treatment of wastewater streams is necessary to achieve an effluent stream suitable for disposal or possible additional processing for reuse.

This course explores different chemical and physical methods of treatment for water and wastewater streams. Course content expands upon concepts learned in basic chemistry and water quality courses.

Specific topics include the physical, chemical, and biological treatment processes of water and wastewater streams. Students learn design concepts for water and wastewater treatment plants. There is also a discussion of water quality standards and regulations. Laboratory sessions demonstrate stan-

dard water and wastewater treatment practices that are currently used in industry.

Prerequisites: CHEM 150 and MATH 161, or permission of the instructor

CONS 432 CIVIL DRAFTING & DESIGN *Fall/Spring, 3 credit hour(s)*

This course covers the design of infrastructure for land development and the preparation of plans and specifications to construct it. Students design and prepare drawings for water supply, storm sewers, sanitary sewers, roads and site grading and drainage using CAD software.

Prerequisites: CONS 122, CONS 385, CONS 216, CONS 372

CONS 472 ADVANCED HIGHWAY DESIGN *Spring, 3 credit hour(s)*

This course focuses on the design of pavements in consideration of subgrade conditions and anticipated traffic load and on drainage of roads to meet design storm conditions. Topics include thickness design of pavements, techniques for subgrade improvement, geotextiles, and design of culverts for design storm conditions.

Prerequisites: CONS 122, CONS 385, CONS 216, CONS 470

CONS 476 PRE-CAPSTONE PROJECT *Fall, 1 credit hour(s)*

This course provides a learning experience that allows a student to review technical literature and propose a related project. This could be a study of a problem and solution, a new project design, improvement of a design, testing and experimentation, assessment, or a number of other project concepts. Over the course of the semester students will work with faculty to propose a project that they will work on in the following semester as their capstone project. All projects must be approved by course faculty.

Prerequisites: Completion of at least 5 semesters or approval by the faculty member.

CONS 477 CAPSTONE PROJECT *Spring, 3 credit hour(s)*

This course provides a learning experience that allows a student to propose, design, and implement a project. This could be a study of a problem and solution of specific equipment, new project design, improvement of an existing product, and many others. All projects must be approved by course faculty.

Prerequisites: Completion of seven semester coursework (senior level status) or permission of the program director.

CONS 485 SOLID WASTE MANAGEMENT *Spring, 3 credit hour(s)*

This course will introduce students to the governing, management, science, and engineering that impacts solid waste. The role of the federal government in the management of municipal solid waste is discussed, in conjunction with state solid waste legislation. Different types of solid waste streams (e.g. household waste, construction and demolition waste) and their characteristics will be examined.

Students learn how to plan municipal solid waste management programs. A significant portion of the course are spent on solid waste landfill engineer-

ing and design (e.g. liner systems, covers, leachate collection and treatment systems, groundwater flow and monitoring, gas migration and collection). Construction and operational principles of landfills are discussed. Opportunities for reduction, reuse, and recycling of solid waste are discussed as one solid waste management technique.

Prerequisites: CONS 385, CONS 216, or permission of instructor

CONS 486 SOIL & GROUNDWATER REMEDIATION *Spring, 3 credit hour(s)*

Students learn about the different types and characteristics of soil and groundwater contaminants. Remedial methods and technologies for soil and groundwater contamination are examined. There is review and discussion of federal and state guidance, regulations, and other pertinent legislation.

Prerequisites: CONS 385, CHEM 150, and CONS 285 or CONS 280 or CONS 216 or permission from the instructor

CONS 487 WATER RESOURCES ANALYSIS, MANAGEMENT, AND DESIGN *Spring, 3 credit hour(s)*

This course includes advanced open channel hydraulics, advanced surface water hydrology and groundwater, and well hydraulics. Management of water resources including reuse and alternative supplies is discussed. Conveyance and distribution water, as well as wastewater and stormwater collection and engineering are discussed. Students perform calculations by hand or with spreadsheets and are introduced to public domain water resources software and the Arc-Hydro data model for Geographic Information Systems. Three lecture hours per week.

Prerequisites: CONS 122, CONS 385, and CONS 350 or permission of instructor.

CYBR 153 COMPUTER LOGIC & ALGORITHMS *Fall/Spring, 3 credit hour(s)*

Computer Logic & Algorithms" is a core course tailored for undergraduate data science students. It focuses on the foundational principles of computer logic and essential algorithms, with a special emphasis on their applications in data analysis and data processing. The course is designed to bridge the gap between theoretical understanding and practical implementation, essential for future data scientists.

CYBR 165 SURVEY OF CYBERSECURITY *Fall, 3 credit hour(s)*

This course is an introductory survey of Cybersecurity and its terminology. Emphasis is on current and emerging technologies. Topics include: overview of computer system components, communications and networks including the Internet, and their security features; basic concepts in programming languages, information system development, and their security solutions; IT impact on society, security, privacy, and ethics.

CYBR 172 COMPUTER FUNDAMENTALS *Fall/Spring, 3 credit hour(s)*

A study of the terminology and concepts associated with computer systems hardware and software with significant Cybersecurity perspectives. Topics

Course Descriptions: Cybersecurity

will include: system hardware components, memory organization and management, operating systems, troubleshooting fundamentals, hardware security and software security, etc.

CYBR 181 PROGRAMMING FUNDAMENTALS

Fall/Spring, 3 credit hour(s)

Programming Fundamentals is a foundational course designed to introduce students to the essentials of programming with a specific focus on Python, one of the most popular and versatile programming languages in contemporary computing and data science. This course is ideal for beginners with little to no prior experience in programming.

CYBR 216 DATABASE FUNDAMENTALS

Fall/Spring, 3 credit hour(s)

This course covers database management systems with a focus on SQL-based products. Topics include logical vs. physical organization, various database models (relational, network, hierarchical), normalization, and creating web-based interfaces for database manipulation. It includes a term project and emphasizes installation and administration of a database server. The course is designed to provide practical and theoretical knowledge in database systems, suitable for students interested in database management and data science.

CYBR 223 NETWORK FUNDAMENTALS

Fall/Spring, 3 credit hour(s)

A study of terminology, hardware and software associated with data communications and network technology with significant Cybersecurity perspectives. Areas of study include design principles for human-computer dialogue, selection criteria for communications devices, the technology of data transmission, techniques and message protocols for line control and error processing, local area networks, networking concepts, network topologies and access control, network performance, network services and design issues, and network media and access methods.

Design, configuration, operation, maintenance, and security questions are explored. Topics include end-user perspective, network operating systems, cabling, hardware protocols, software and applications, design, and administration.

Prerequisites: CYBR 172 or CYBR/CITA 170

CYBR 250 INFORMATION SECURITY

Fall, 3 credit hour(s)

An introduction to various technical and administrative aspects of Information Security and Assurance. Students are exposed to the spectrum of Information Security activities, methods, methodologies, and procedures. Coverage include inspection and protection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical and managerial responses and an overview of Information Security planning and staffing functions.

Prerequisites: CYBR 165 or CITA 220

CYBR 273 OPERATING SYSTEM FUNDAMENTALS

Fall/Spring, 3 credit hour(s)

This is a project intensive course covering

current operating systems with significant Cybersecurity perspectives. Projects are designed to give students an overview of operating systems, and encompass the major aspects of operating systems. Linux operating system use and administration will be covered in this course. Windows operating system administration through PowerShell will also be covered.

Prerequisites: CYBR 172 or CYBR/CITA 172

CYBR 352 ETHICAL HACKING AND PENETRATION TESTING

Spring, 3 credit hour(s)

This course introduces students to a wide range of topics related to ethical hacking and penetration testing. The course provides an in-depth understanding of how to effectively protect computer networks. The topics cover the tools and penetration testing methodologies used by ethical hackers and provide a thorough discussion of what and who an ethical hacker is and how important they are in protecting corporate and government data from cyber-attacks.

Prerequisites: CYBR 165 or CITA 220

CYBR 354 CYBER INCIDENT RESPONSE AND DISASTER RECOVERY

Fall, 3 credit hour(s)

This course presents methods to identify vulnerabilities within computer networks and the countermeasures that mitigate risks and damage. It covers market-leading content on contingency planning, effective techniques that minimize downtime in an emergency, and ways to curb losses after a breach in case of a network intrusion.

Prerequisites: CITA 250 Information Security

CYBR 356 CYBERSECURITY DEFENSE AND COUNTERMEASURES

Fall, 3 credit hour(s)

This course provides a thorough guide to perimeter defense fundamentals, including intrusion detection and firewalls. It covers advanced topics such as security policies, network address translation (NAT), packet filtering and analysis, proxy servers, virtual private networks (VPN), and network traffic signatures. This course examines the latest technology, trends, and techniques including virtualization, IPv6, and ICMPv6 structure, making it easier to stay on the cutting edge and one step ahead of potential security threats.

Prerequisites: CITA 250 Information Security, or permission of the instructor

CYBR 360 CRYPTOLOGY IN THEORY AND PRACTICE

Spring, 3 credit hour(s)

This course provides a background in the characteristics of different cryptologic schemes. It introduces students to protocols and key establishment methods required for certificates and public key infrastructure.

Prerequisites: CITA 165 or CITA 220

CYBR 368 CYBERCRIME LAW & POLICY

Fall/Spring, 3 credit hour(s)

This course provides students with an understanding of cybercrime law and policy, both in the US and internationally while touching upon the

broader concepts of cyberspace and cybersecurity. The course provides a basic understanding of the US Constitution and an introduction to US law relating to cybercrimes, which target computers and networks, as well as those which use computers to commit more conventional crimes such as fraud and theft. The course also gives students an understanding of criminal law concepts such as intent, evidence, conspiracy, and privacy rights, and will review some important US Supreme Court cases related to cybercrime. Students also consider international law, cyber terrorism, national security and cyberwar.

Prerequisites: 45 completed credits or permission of instructor

CYBR 416 CYBERSECURITY IN HEALTHCARE

Fall/Spring, 3 credit hour(s)

This course provides a high-level overview of the current state of Cybersecurity in the HealthCare Industry. Students will examine current threats and trends, provide insight as to why Healthcare is such a target rich environment, and discuss ways to mitigate these risks while still allowing Healthcare staff the ability to do their jobs successfully.

Prerequisites: 45 completed credit hours or permission of instructor

CYBR 440 NETWORK MANAGEMENT

Fall, 3 credit hour(s)

An advanced study of network management concepts, architectures, protocols, models, tools, systems, and applications. The course concentrates on the implementation of the Simple Network Management Protocol (SNMP). Students are also introduced to the use of the Desktop Management Interface (DMI) standard and Web-based Management.

Prerequisites: CITA 220

CYBR 450 CYBERSECURITY BODY OF KNOWLEDGE

Spring, 3 credit hour(s)

This course provides a comprehensive, trustworthy framework of practices for assuring cybersecurity. It helps future security professionals understand how the various roles and functions within cybersecurity practice can be combined and leveraged to secure an organization. The course content is derived from the Department of Homeland Security's Essential Body of Knowledge (EBK) for IT Security and the International Information System Security Certification Consortium's Common Body of Knowledge (CBK).

Prerequisites: CITA 250 Information Security, or permission of instructor.

CYBR 455 ACCESS CONTROL, AUTHENTICATION, PUBLIC KEY INFRASTRUCTURE

Fall, 3 credit hour(s)

This course defines the components of access control, provides a business framework for implementation, and discusses legal requirements that impact access control programs. It looks at the risks, threats, and vulnerabilities prevalent in information systems and IT infrastructures and how to handle them with risk mitigation strategies and techniques. Access control systems and stringent authentication are presented as ways to mitigate risk. It also covers Public Key Infrastructure (PKI) components and

Course Descriptions: Cybersecurity, Data Science, Emergency Mgmt.

how the various components support e-business and strong security services.

Prerequisites: CITA 360 Cryptology in Theory and Practice, or permission of instructor.

CYBR 485 CYBERSECURITY PRACTICE

Fall/Spring, 6 credit hour(s)

This course is an internship course which integrates classroom work and practical experience for senior level students in Cybersecurity B.S. program. It is a structured field experience in which an intern acquires and applies knowledge and skills while working in a responsible role. Working with a supervisor, the student will perform prescribed work within an administrative or operational setting. The internship will be tailored to the individual student's career interests and the needs of the supervising organization.

Prerequisites: Senior status in Cybersecurity B.S. program

CYBR/JUST 365 DIGITAL FORENSIC ANALYSIS

Fall, 3 credit hour(s)

This course is designed to cover: the need for computer forensics, best practices for general incidence response, legal aspects of forensics, tools and techniques to perform a full computer forensic investigation.

Prerequisites: Junior Level Status in Cybersecurity, Information Technology, or any Baccalaureate Criminal Justice Program

DATA 155 SURVEY OF DATA SCIENCE

Fall/Spring, 3 credit hour(s)

Fundamentals of data science. It helps students understand and learn some concepts necessary to start and work as data scientists. It covers definitions and main concepts in data science.

DATA 230 APPLIED DATA SCIENCE - R PROGRAMMING

Fall/Spring, 3 credit hour(s)

Fundamentals of applied data science – R morning. It helps students understand and learn some concepts necessary to start and work as data scientists. It covers the definitions, and main concepts, of data science.

DATA 240 AI FUNDAMENTALS

Fall/Spring, 3 credit hour(s)

This course introduces students to the foundational concepts of artificial intelligence (AI). It covers the history, basic principles, methodologies, and applications of AI. By the end of the course, students will have a solid understanding of AI's core concepts and its significance in today's technological landscape.

DATA 315 DATA MINING AND MACHINE LEARNING

Fall/Spring, 3 credit hour(s)

Concepts and techniques in processing gathered data or information, which will be used in various applications. Specifically, data mining and the tools used in discovering knowledge from the collected data. This course focuses on the feasibility, usefulness, effectiveness, and scalability of techniques of large data sets. After describing data mining, this

course explains the methods of knowing, preprocessing, processing, and warehousing data. Then, the methods involved in mining frequent patterns, associations, and correlations for large data sets are described. The course details the methods for data classification and introduces the concepts and methods for data clustering. Finally, it discusses the outlier detection and the trends, applications, and research frontiers in data mining.

DATA 320 DATA SECURITY AND PRIVACY

Fall/Spring, 3 credit hour(s)

The goal of the course is to familiarize the students with basic concepts of data security and privacy, their definitions, applications and current advances in research community and industry.

DATA 321 BIG DATA FUNDAMENTALS

Fall/Spring, 3 credit hour(s)

Review the Big Data concepts, methods, and approaches and provide some examples of Big Data applications in Data science.

DATA 415 ETHICS IN DATA SCIENCE

Fall/Spring, 3 credit hour(s)

Ethical considerations on the collection, storage, use and analysis of data. This course helps students to examine the ethical and privacy aspects of collecting and managing data. Discovering the effect of the data science in the 21st century. The students are presented with discussions on the complications of data collection in the modern society and the principles of transparency, accountability and fairness as they understand the crucial aspect of having a shared set of ethical values. Students learn about best practices for responsible data management, using basic methods to preserve anonymity of the users when dealing with personal identifiable information.

DATA 420 ADVANCED DATA MINING AND MACHINE LEARNING

Fall/Spring, 3 credit hour(s)

This Course provides advanced topics in machine learning and data mining, including prediction, generating, and classification algorithms.

Prerequisites: DATA 315

DATA 421 DEEP LEARNING FUNDAMENTALS

Fall/Spring, 3 credit hour(s)

This course reviews the deep learning concepts, methods, and approaches and provides some examples of deep learning applications in prediction and classification.

Prerequisites: DATA/CYBR 315

DATA 422 ADVANCED AI AND CHATGPT

Fall/Spring, 3 credit hour(s)

The Advanced AI and ChatGPT course offers a specialized exploration into the realm of advanced topics in artificial intelligence, with a keen focus on the ChatGPT models. Building upon foundational AI knowledge, this course dives deep into the architecture, training, and deployment of state-of-the-art chatbots. Participants will gain hands-on experience in fine-tuning conversational models, addressing challenges in chatbot design, and understanding the

ethical implications of deploying such models. Upon completion, participants will be equipped with the skills to develop, refine, and implement advanced conversational AI solutions in various domains.

Prerequisites: DATA 240

EADM 201 FUNDAMENTALS OF EMERGENCY MANAGEMENT

Fall, 3 credit hour(s)

This course presents the theories, principles, and approaches to emergency management. The whole community approach to emergency management will be a focus with the phases of mitigation, preparedness, response, and recovery serving as the foundation. Analyses of past incidents, emergencies, disasters, and catastrophes will be presented along with their impacts on policy formation in the development of current emergency management doctrine. The role, duties, and importance of the Emergency Manager will be discussed throughout the semester.

EADM 205 HAZARD ASSESSMENT AND MITIGATION

Fall/Spring, 3 credit hour(s)

This course focuses on a generalized understanding and an awareness of various types of threats and hazards. Central to the course is the understanding the technical cooperation regarding hazard and vulnerability assessments, planning doctrine and methodology, inclusion of hazard mitigation strategies in the formulation of projects, and resource management.

EADM 220 EMERGENCY MANAGEMENT & RESPONSE

Spring, 3 credit hour(s)

The course presents methods for communities and organizations to recognize and respond to disaster or emergency situations. It encompasses the strategies and tactics used by emergency managers and other responders and focuses on expanded proactive measures to safeguard lives and assets from natural or man-made emergencies and disasters. The course includes modules covering emergency operations planning, assessing effects and responding to high risk hazards, decreasing operational interruptions, emergency response and support functions, and maintaining community lifelines.

EADM 222 EMERGENCY PLANNING

Spring, 3 credit hour(s)

The course prepares students to help reduce the growing toll (deaths and injuries, property loss, environmental degradation, business and economic disruption associated with disasters. Students will understand process and technologies (hazards risk management process) that organize preparedness and response in a comprehensive framework that may be applied at all levels of public and private sector organizations. The course presents processes for development of personal and community/organizational emergency plans.

EADM 301 INCIDENT COMMUNICATIONS AND INFORMATION MANAGEMENT

Spring, 3 credit hour(s)

This course provides the student with usable

Course Descriptions: Emergency Management, Early Childhood

tools and techniques that are universally prescriptive and can be implemented in nearly every risk-associated situation, from pandemics to accidents to terrorist attacks, and even to challenges to organizational reputation management.

Students who complete this course are prepared to make the best possible decisions about the affected population's well-being during an incident. Additionally, students practice accepting and communicating those decisions, within evolving situations and severe time constraints.

Prerequisites: 45 credit hours completed or permission of instructor

EADM 307 LEGAL ISSUES IN EMERGENCY AND DISASTER MANAGEMENT

Spring, 3 credit hour(s)

This course provides a general overview of the major legal and liability issues in emergency management. The focus is on the legal environment within which emergency managers operate, including their roles in rule-making, policy administration, and their potential personal legal liability for discretionary actions.

Prerequisites: ENGL 101 and EADM 205 or permission of instructor.

EADM 310 EMERGENCY MANAGEMENT BUDGETING AND GRANTS

Fall, 3 credit hour(s)

This course examines the technical, administrative, and regulatory fundamentals of budgets and grants in public safety agencies. Municipal, state, and Federal fiscal management will serve as a foundation to explore more specific applications in Emergency Management, Homeland Security, Law Enforcement, Fire Service, and other disciplines. Students will apply accepted fiscal management processes to develop funding proposals, incorporate grants into existing budgets, and discuss fiscal accountability.

Prerequisites: Junior or Senior status and completion of MATH GER and EADM 201

EADM 320 RECOVERY & RESILIENCE

Fall, 3 credit hour(s)

This course defines how well emergency management and other stakeholders collaborate to meet the needs of individuals, households, communities, states, and the federal government in ongoing efforts to recover from catastrophic and other incidents. The content will cover pre-disaster planning for recovery, current doctrine and principles for recovery planning and activity, present case studies of recovery from past disasters, and provide an overview of assessing resilience for disasters.

Prerequisites: 45 credits or permission of instructor

EADM 330 EMERGENCY MANAGEMENT IN PUBLIC HEALTH AND HEALTHCARE

Fall, 3 credit hour(s)

The emergency management function within the public health and healthcare sector is important as organizations continue to strategize to increase resilience for disasters. This course provides students an overview of the function and allows for discussion of specific emergency management competencies and strategies to prepare for, respond to, and recover

from health and other emergencies.

Students learn from past incidents and demonstrate an understanding of standards and programs designed to enhance emergency preparedness.

Prerequisites: 45 Credits completed or permission of Instructor

EADM 400 INCIDENT MANAGEMENT SYSTEMS

Fall, 3 credit hour(s)

This course provides a detailed overview of the National Incident Management System (NIMS) and includes scenarios, examples, and opportunities for students to apply what they have learned. NIMS is a framework for organizational management of emergencies and disasters used by local jurisdictions, states, and federal agencies.

NIMS has been widely adopted as the standard for emergency management and unique and complementary organizational structures have been developed to provide command and coordination, resource management, and personnel competency assessment to all incidents.

Prerequisites: Hazard Assessment and Mitigation (EADM 205) or permission of the instructor.

EADM 405 EQUITABLE EMERGENCY MANAGEMENT

Fall, 3 credit hour(s)

Examine the issues encountered by emergency managers during disasters that may prevent the provision of emergency services and protection to all members within a community. Students will apply emergency management theory to attain protection, response, and recovery strategies that are inclusive of people with disabilities, traditionally marginalized groups, and community members who may speak different languages.

Prerequisites: Junior or senior status

EADM 430 SIMULATED DISASTER TRAINING

Fall/Spring, 3 credit hour(s)

This course is designed for students to acquire the knowledge and skills necessary to develop, conduct and evaluate activities and exercises. Students will assess and evaluate an exercise in actual emergency and/or disaster situations.

Prerequisites: 45 credits or permission of instructor.

EADM 435 DISASTER SIMULATION

Spring, 6 credit hour(s)

The course is a highly structured applied interactive educational and training simulation experience that requires the student to participate in sequential exercises that focus on the application of skills and abilities in emergency and disaster management. Students will create an operational scenario, assess its application, calculate applicable scenario coordination and conduct the evaluation of exercise(s) participant performance associated with an actual emergency and/or disaster situation. Participants are required to develop, conduct, and evaluate these activities through the use of phased proficiency exercise applications.

Prerequisites: Incident Command System (EADM 400) and Simulated Disaster Training (EADM 430) or permission of instructor.

EADM 480 INTERNSHIP IN EMERGENCY AND DISASTER MANAGEMENT

Fall/Spring, 3-9 credit hour(s)

The EADM internship is an academic program integrating classroom work and practical experience with cooperating agencies. The internship allows seniors the opportunity to apply classroom learning in emergency and disaster response associated agencies. It is a structured experience in which an intern acquires and applies knowledge and skills, while working in a responsible role.

Prerequisites: Incident Command: System Coordination & Assessment (EADM 400), senior level status in the Emergency Management program, or permission of instructor.

EADM 485 SENIOR PROJECT

Fall/Spring, 3-9 credit hour(s)

Students will complete a senior research project specifically addressing issues in the emergency and disaster management arena. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee.

Prerequisites: Incident Command: System Coordination & Assessment (EADM 400) or permission of instructor.

ECHD 101 INTRODUCTION TO EARLY CHILDHOOD

Fall, 3 credit hour(s)

An overview of the history, theories, and philosophies that form the foundation of Early Care and Education. All aspects of development (physical, cognitive, social-emotional, and communication) are presented and studied within an ecological context (family, community, culture, society). Specific emphasis is placed on understanding the various roles/responsibilities early childhood educators have in fostering the well-being and development of young children birth-5 years.

ECHD 105 ORIENTATION TO THE FIELD EXPERIENCE IN EARLY CHILDHOOD

Fall, 1 credit hour(s)

The Early Childhood Orientation will prepare students for field work experiences in various Early Childhood settings.

Students will become familiar with field work requirements, policies, and procedures. Students will prepare for and complete mandatory health clearances, NYS Office for Children Forms, complete the Foundations in Health and Safety Training, and file all required documents and contracts based on placement sites.

Students will become acclimated to the SUNY Canton Early Childhood Field Experience guidelines and understand the role of the college supervisor, site mentor and the responsibilities and expectations of the student. By the end of the course all students will have confirmation of their Field Experience placement site. ECHD Majors only

Prerequisites: ECHD 101, Co-requisite(s): ECHD 125

Course Descriptions: Early Childhood

ECHD 121 WELLNESS IN YOUNG CHILDREN: PROMOTING HEALTH, SAFETY, NUTRITION

Fall, 3 credit hour(s)

In this course, students will develop the knowledge and skills necessary for ensuring the well-being of the young child. The course focuses on the role of the teacher in creating and incorporating health, safety, and nutrition programs and activities in early childhood settings to support children's development, healthy lifestyle practices, and learning.

ECHD 125 CURRICULUM DEVELOPMENT

Fall, 3 credit hour(s)

In this course, students will examine curriculum methods in early care and education. Students will create and implement thematic lessons and activities to promote the skill development of the whole child. Special emphasis will be given to the process of curriculum development, developmentally appropriate methods, child-centered planning, and active play-based learning experiences for young children, birth - age 5.

Prerequisites: ECHD 101 and restricted to Early Childhood Major (1327), Early Childhood Management Major (2699)

ECHD 131 INFANTS AND TODDLERS

Spring, 3 credit hour(s)

In this course students will gain an understanding of the developmental milestones and needs of the young child from infancy to age three. This course will explore the core competencies of the infant-toddler, caregiver and the caregiver and family relationship. Students will identify and apply best practices for providing optimal high quality care for infants and toddlers.

ECHD 200 PLANNING PROGRAM FOR YOUNG CHILDREN

Spring, 3 credit hour(s)

In this course, students will gain knowledge of key components that make up a high-quality early childhood setting. Students will examine the importance of a program philosophy, family involvement, home-school communication, learning centers, scheduling, and state child care licensing regulations. Principles of program planning related to high quality early care and education, administration, and leadership will be applied.

Prerequisites: ECHD 101, ECHD 125 and restricted to Early Childhood Major (1327), Early Childhood Management Major (2699)

ECHD 201 EARLY CHILDHOOD FIELD EXPERIENCE

Spring, 4 credit hour(s)

This course is an off-campus early childhood field experience. Assignment options may include licensed group childcare programs, pre-k, or kindergarten classrooms, or industry specific [children's museum, library, play-based enrichment] settings. Students will complete an 80-hour field experience with children ages birth - 5 years. Under the direct supervision of an assigned mentor, students will apply knowledge and skills acquired through coursework with a focus on child observation, development, implementation of age-appropriate curriculum plans, and activities. Students will

participate in a weekly 50-minute seminar led by the student teaching college supervisor.

Prerequisites: ECHD 101, ECHD 121, ECHD 125, ECHD 131. Minimum 2.0 overall GPA, and permission of the ECHD Program Coordinator.

ECHD 204 EARLY CHILDHOOD OBSERVATION

Spring, 3 credit hour(s)

This course introduces students to observation, assessment, and documentation of young children's development from birth to age five. Students will gain an understanding of methods utilized for recording children's development and how assessment informs instruction and programming. The course emphasizes ethical observation, appropriate assessment methods, and the influence of family, culture, and environment on child development.

Prerequisites: Early Childhood Major (1327) or Early Childhood Care & Management Major (2699) and ECHD 101, ECHD 105, ECHD 121, ECHD 131, ECHD 125, or permission of instructor.

ECHD 250 CHILDREN WITH SPECIAL NEEDS

Fall, 3 credit hour(s)

In this course, students will examine various special needs of young children. Students will gain knowledge of inclusive practices, teaching modifications, prevention and intervention strategies, and support services for children, families, and the community. Assessment, identification, and general knowledge of the special needs of all children will be examined, as well as social policies and initiatives to support teachers, families, and children.

Prerequisites: Early Childhood Major (1327), Early Childhood Management Major (2699), Early Childhood Studies Minor or permission of instructor.

ECHD 285 ISSUES AND POLICIES IN EARLY CARE & EDUCATION

Fall, 3 credit hour(s)

In this course, students will draw from academic, life, and coursework to explore current issues and policies in the field of early education and care. Social issues impacting the well-being of children, families, and the community will be explored. Students will research issues and investigate approaches to resolving some of these challenges.

Prerequisites: ENGL 101, ECHD 101, SOCI 101 or PSYC 101. Early Childhood Major (1327), Early Childhood Management Major (2699), Early Childhood Studies Minor, or permission of instructor.

ECHD 301 FOSTERING RELATIONSHIPS IN EARLY CHILDHOOD PROGRAMS

Spring, 3 credit hour(s)

This course examines the importance of establishing partnerships between early childhood educators and families. Students will explore strategies to foster connections with families and promote inclusive practices. Topics include classroom community building, family engagement, communication, and the importance of creating and maintaining reciprocal and respectful relationships with families.

Students will examine the educator's role in supporting families understanding of child development, play-based curriculum, and practices that

promote a collaborative and supportive environment for all involved in the care and education of young children.

Prerequisites: ECHD 101, Early Childhood Major (1327), Early Childhood Management Major (2699), Early Childhood Studies Minor, or permission of instructor

ECHD 302 MULTI-CULTURAL EARLY CHILDHOOD CURRICULUM

Fall/Spring, 3 credit hour(s)

This course examines the role and responsibility of the early childhood professional in creating a culturally responsive and inclusive classroom environment. Anti-bias curriculum methods, activities, multi-cultural literacy, and meaningful ways to create a welcoming and supportive environment that honors and celebrates families, children, and teachers will be studied. This course will examine inclusive policies, and emphasize the importance of supporting children's social learning regarding acceptance, tolerance, and respect for self and others.

Prerequisites: ECHD 101; ECHD 125 or permission of instructor.

ECHD 303 PHYSICAL ACTIVITY: INDOORS & OUT

Fall/Spring, 3 credit hour(s)

This course examines the importance of physical activity for the developing child. Students will research the value of such active play experiences, and the effect physical engagement has on learning, and health. Students will explore ways to incorporate movement activities into classroom schedules and lessons to best meet the needs of the young child. The outdoor space, viewed as an extension of the classroom, will be studied. Students will create and engage in movement activities throughout the course.

Prerequisites: ENGL 101; ECHD 101; PSYC 101 or permission of instructor.

ECHD 304 STEM IN THE EARLY YEARS

Fall/Spring, 3 credit hour(s)

This course focuses on integrating STEM (Science, Technology, Engineering, and Math) in early childhood settings and curriculum. Young children acquire STEM skills through exploration, inquiry, and active engagement. Topics will include methods for promoting scientific discovery and learning, integrating science and technology, developing mathematical concepts, and facilitating active experimentation and engagement in the early childhood classroom. Basic components of STEM and effective ways to incorporate STEM into curriculum and everyday activities with young children will be studied.

Prerequisites: ENGL 101

ECHD 306 PURPOSEFUL PLAY-BASED LEARNING

Fall/Spring, 3 credit hour(s)

In this course, students will gain an understanding of the value of intentional and purposeful teaching strategies supported through meaningful play-based experiences for the young child. Students will develop learning plans, design primary classroom spaces that support playful engagement, and explore play-based curriculum to best support the developmental needs and milestones of children, birth - age 5.

Prerequisites: ECHD 101

Course Descriptions: Early Childhood, Electricity for Trades

ECHD 310 LITERACY ACTIVITIES ACROSS THE CURRICULUM

Fall/Spring, 3 credit hour(s)

In this course students will develop an understanding of high-quality literacy experiences for the early childhood classroom. Beyond story reading, active engagement with books can provide a foundation for developing and integrating a curriculum and activities that support all aspects of child development and learning. Purposeful and intentional teaching methods will be shared, featuring a selection of popular children's literature.

Prerequisites: ECHD 101

ECHD 312 ERIC CARLE AND EARLY CHILDHOOD

Fall/Spring, 3 credit hour(s)

Study renowned children's author Eric Carle [1929-2021] and the 70+ books created throughout his career as a self-proclaimed "picture writer". Students will explore many of Carle's story books as well as his unique art form as an illustrator.

Students will discover the inspiration and meaning behind several of Eric Carle's children's books and how each can provide a foundation for creating activities and engaging curriculum in the early childhood classroom.

Prerequisites: ECHD 101

ECHD 340 POLICIES AND REGULATIONS IN EARLY CHILDHOOD SETTINGS

Fall, 3 credit hour(s)

This course examines childcare licensing regulations. Students will gain knowledge of state mandated policies and procedures pertaining to health and safety, children's programming, staffing, and the physical environment. Students will research and develop policies according to state childcare mandates and apply methods of childcare program evaluation criteria throughout the course.

Prerequisites: ECHD 101, ECHD

121 and restricted to Early Childhood Major (1327), Early Childhood Management Major (2699), Early Childhood Minor, or permission of instructor.

ECHD 401 DEVELOPMENTALLY APPROPRIATE PRACTICE: LEARNING ENVIRONMENTS INFANTS - AGE 5

Spring, 3 credit hour(s)

This course focuses on creating quality early learning environments for infants, toddlers, and preschoolers. Students will research and apply concepts of developmentally appropriate practice related to purposeful and intentional curriculum activities and learning centers within the early care and education environment. Students will gain knowledge of the value of play-based learning centers that engage, challenge, and promote the development of the young child.

Prerequisites: ECHD 101, ECHD 125, Early Childhood Management Major (2699), Early Childhood Studies Minor, or permission of instructor

ECHD 402 EARLY LITERACY AND LANGUAGE DEVELOPMENT

Fall/Spring, 3 credit hour(s)

This course expands on students' knowledge of

language and literacy development in young children. Students explore the four broad interrelated areas of early childhood language arts – speaking (oral), listening, writing, and reading. The course provides strategies for enhancing language/literacy experiences in a literacy – rich environment that engages children in developmentally appropriate language arts experiences.

Prerequisites: ENGL 101

ECHD 403 FAMILY CHILD CARE DEVELOPMENT AND MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course examines the Family Child Care profession. Students are introduced to state policies and regulations for establishing a quality early care and education home-based center. Students will gain an understanding of the challenges and rewards of this unique small business.

Topics include policy, procedures, and contract development, multi-age curriculum planning, and home-based child care space design, to best meet the needs of the child care provider, and families and children served.

Prerequisites: ECHD 101; ECHD 121 or permission of instructor.

ECHD 404 POSITIVE CHILD GUIDANCE

Fall, 3 credit hour(s)

This course provides students with an understanding of how to support and address the needs of the young child and the behavioral challenges commonly associated in early childhood. Students will explore appropriate positive guidance strategies that foster self-control, problem-solving, and social-emotional competence. Emphasis is placed on effective approaches for guiding both individual and group behavior, with practical strategies for establishing and maintaining a respectful, cooperative early childhood setting.

Prerequisites: ECHD 101; ECHD 131, PSYC 101 and PSYC 220; Early Childhood Major (1327), Early Childhood Management Major (2699), Early Childhood Studies Minor, Child Care Microcredential, or permission of instructor

ECHD 405 EARLY CHILD MENTOR: TEACHER AS TRAINER

Fall, 3 credit hour(s)

This course explores the Early Childhood Program Administrator's role as both mentor and facilitator of teacher development. Students will gain an understanding of quality professional training for early care and education providers that are meaningful and relevant in promoting the professional competencies of the individual and program quality.

Various professional development models and training practices will be studied and applied.

Prerequisites: Completion of 45 credit hours or permission of instructor

ECHD 409 ORIENTATION INTERNSHIP: EARLY CHILDHOOD CARE AND MANAGEMENT

Fall/Spring, 1 credit hour(s)

This course informs and prepares students for the Bachelor of Business Administration in Early Childhood Care and Management internship. Students will examine the requirements and options available for the internship experience. Students will

develop professional career documents, including a resume and cover letter.

Prerequisites: Early Childhood Management Major (2699), Senior Level Status, or permission of instructor.

ECHD 410 INTERNSHIP: EARLY CHILDHOOD CARE AND MANAGEMENT

Fall/Spring, 3-9 credit hour(s)

This internship course offers students practical experience in early childhood care and management settings. Students will apply principles of management and administration, along with concepts and skills learned throughout their BBA studies in an early childhood program or organization. The internship experience will be customized to align student career goals and the needs of the organization. All internship proposals must be submitted and approved prior to course registration.

Prerequisites: ECHD 409, Early Childhood Management Major (2699), senior level status and overall, 2.50 GPA, or permission of instructor.

ECHD 411 SENIOR SEMINAR

Fall/Spring, 3 credit hour(s)

This interdisciplinary capstone course integrates content from Business, Management, and Early Childhood courses. Students will broaden their understanding of topics related to the childcare industry and field from a political, societal, and economic perspective.

Students will engage in research applicable to their interests, professional development, career, and future education.

Prerequisites: Senior level status in Early Childhood Care and Management; 2.50 overall GPA, or permission of the instructor

ECHD 420 EARLY CHILDHOOD PROGRAM DEVELOPMENT AND MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course focuses on the role and responsibilities of the childcare program administrator. Students will gain an understanding of the complexities, demands, and rewards of such a position. Topics will include organizational and personnel management, human relations, quality programming and evaluation, and professional standards associated with leading an early care and education center.

Prerequisites: ECHD 101, ECHD 121, Early Childhood Management Major (2699) or permission of instructor.

ECMR 101 ELECTRICITY FOR TRADES

Fall, 3 credit hour(s)

Exploration of direct and alternating current circuits, resistance, inductance, capacitance, and magnetism through practical applications. Series and parallel circuits, metering, wire sizing, batteries, and motors connect the learner to industry needs.

Prerequisites: MATH 106

ECMR 102 ELECTRICITY FOR TRADES II

Spring, 3 credit hour(s)

Continuation of Electricity for Trades I. Includes additional instruction in basic AC system theory, three phase circuits, motors - motor control, transformer theory - connections. Laboratory projects

Course Descriptions: Electricity for Trades, Economics

include diagnosis of electrical equipment, motors - motor starters, transformer connections and raceway installations for Commercial Electrical applications.

Prerequisites: ECMR 101, MECH 128. Co-Requisites: MATH 101 or MATH 106

ECMR 103 ELECTRICITY FOR TRADES LAB *Fall, 4 credit hour(s)*

Exploration of direct and alternating current circuits, resistance, inductance, capacitance, and magnetism through practical applications. Series and parallel circuits, metering, wire sizing, batteries, and motors connect the learner to industry needs.

Prerequisites: None. Co-requisite: MATH 106

ECMR 104 ELECTRICITY FOR TRADES II LAB *Spring, 4 credit hour(s)*

Continuation of Electricity for Trades I. Includes additional instruction in basic AC system theory, three phase circuits, motors - motor control, transformer theory - connections. Laboratory projects include diagnosis of electrical equipment, motors - motor starters, transformer connections and raceway installations for Commercial Electrical applications.

Prerequisites: ECMR 101, MECH 128.

Co-requisites: ECMR 102, MATH 101 or MATH 106

ECMR 173 INTRODUCTION TO THE NATIONAL ELECTRICAL CODE *Fall, 3 credit hour(s)*

This course will cover the basics of understanding the National Electrical Code, with electrical drawing illustrations. Topics include circuit, over-current protection devices, box and wire sizing, with service entrance design. A final project will include a residential electrical design in accordance with the National Electric Code. Certificate/ AAS Elective Credit.

ECMR 175 PHOTOVOLTAIC INSTALLER *Fall, 3 credit hour(s)*

Instruction on the installation and maintenance of photovoltaic systems. The course includes installation of components and sub-systems based on the particular types of systems. As part of the course students will review permits requirements, alignment of arrays based on south orientation and building roof designs, mounting options, wind loading, aesthetic wiring that complies with NEC. Taught are the ways to verify the system is working, open circuit testing, short circuit testing, start-up and shutdown, and emergency response with proper labeling.

ECON 101 PRINCIPLES OF MACROECONOMICS *Fall/Spring, 3 credit hour(s)*

This course is the study of the market economy, role of government, income determination, business cycle, inflation, unemployment, banking system, monetary and fiscal policy, population, economic growth, and international trade within a market economy.

ECON 103 PRINCIPLES OF MICROECONOMICS *Fall/Spring, 3 credit hour(s)*

This course provides a study of supply, demand, elasticity, theory of the firm, market structures, gov-

ernment regulation, marginal productivity theory, and selected contemporary economic issues.

Prerequisites: Macroeconomics (ECON 101) or GER Math or permission of instructor.

ECON 105 SURVEY OF AMERICAN ECONOMIC HISTORY *Spring, 3 credit hour(s)*

Fundamental tools of economics will be used to explain important events and issues in the history of the United States. Topics to be surveyed include the United States' growth and transformation into an industrialized nation, development and transitions in American labor, consumers and culture, the rise of corporate America, changes in the role of government, economic regulations, monetary and fiscal policy, the origins of major institutions and their economic impact, and increased global awareness.

ECON 120 INTRODUCTION TO LABOR STUDIES *Fall/Spring, 3 credit hour(s)*

Within an historical context, this course examines the economic, social and technical forces that shape labor conditions in the USA. Among the topics covered are: the changing nature of work under capitalism, collective bargaining, theory and value of workplace skills, and the impact of economic globalization on labor.

ECON 201 ECONOMICS & SOCIAL ISSUES *Fall/Spring, 3 credit hour(s)*

This course applies basic economic concepts to contemporary social issues. The current real world public policies surrounding these issues will be examined, as well as the impact such policies have on society.

ECON 301 REGIONAL ECONOMIC DEVELOPMENT IN AFRICA *Fall/Spring, 3 credit hour(s)*

This course provides an analytical study of economic development of one specific African region. Topics to be covered include inequality, poverty, economic growth, demography, fertility, mortality, migration, employment, education, health, trade, globalization, food production, nutrition, environment, and sustainable development. Different African regions (Central Africa, East Africa, North Africa, Southern Africa, and West Africa) are studied on a cycle. Students may take one "Regional Economic Development in Africa" for Gen Ed. 6 credit. Students may take two "Regional Economic Development in Africa" for elective credit.

Prerequisites: ECON 101, or ECON 103, or SOCI 101, or MATH 141, or permission of the instructor.

ECON 305 ECONOMICS OF CRIME *Fall/Spring, 3 credit hour(s)*

This course examines the behavior of criminals and use economic concepts to analyze crimes of violence, crimes against property, and the markets for illegal goods and services. Topics to be covered include costs of crime to society and its various stakeholders, prostitution and drug crimes, issue of decriminalization and legalization, allocation of resources to and within the criminal justice system, crime prevention strategies, and efficiency and ef-

fectiveness of the use of punishment as a form of crime deterrence. In addition, it uses an economic understanding of crime and crime behavior to develop public policy options.

Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103) and a minimum 45 credit hours, or permission of instructor.

ECON 310 ECONOMICS OF HEALTHCARE *Fall/Spring, 3 credit hour(s)*

This course introduces students to the discipline of health economics and applies economic concepts to the health care sector. Topics to be covered include the demand for health care, health production and costs, health care markets models, health insurance markets, managed care, structure, conduct and performance of pharmaceutical, physician, and hospital services industries. In addition, the role of government in health care markets and various healthcare reforms proposed in the U.S. and overseas is discussed.

Prerequisites: ECON 101 and MATH 141 or NURS 370 or SSCI 370

ECON 314 MANAGERIAL ECONOMICS *Spring, 3 credit hour(s)*

Global case studies from the private, public and nonprofit sectors are utilized to illustrate the application of economic theory and quantitative methods to managerial decision making. Students engage in problem solving exercises that integrate various principles of business, statistics and economics to determine market forecast, pricing strategy, resource usage, and production level.

Prerequisites: Accounting Principles I (ACCT 101) and student must have met the General Education Requirement in Math, or Microeconomics (ECON 103), or permission of instructor.

ECON 315 GLOBAL ECONOMY *Fall, 3 credit hour(s)*

Students examine the historical development of the global economy and the increasing interdependence of economies, governments, and public policy. Economic theories in international trade, finance and monetary policy are explored within the context of globalization. Contemporary global economic issues such as the environment, income distribution, and development are analyzed using case studies from various nations.

Prerequisites: Principles of Microeconomics (ECON 103) or at least 30 college credits with a 2.0 GPA or permission of instructor.

ECON 320 ENVIRONMENTAL ECONOMICS *Fall, 3 credit hour(s)*

Issues and policies involving renewable and nonrenewable energy, natural resource management, pollution control, global climate change, and sustainable development are explored through traditional neoclassical economics as well as through the contemporary approach of ecological economics.

Prerequisites: Principles of Macroeconomics (ECON 101) or Principles Microeconomics (ECON 103), GER Math and a minimum of 45 college credits with a GPA of 2.0 or better, or permission of the instructor.

Course Descriptions: Economics, Education, Electrical

ECON 370 ENGINEERING ECONOMICS *Spring, 3 credit hour(s)*

This course will expose students to economic theory through the use of mathematical modeling with a focus on economic decision making for engineers. Microeconomics topics will include supply and demand market analysis, and profitability. Macroeconomics topics will include the aggregate market, economic indicators, fiscal policy and monetary policy. The course will include segments of the engineering economic analysis covered in the Professional Engineering exam such as the application of different economic analysis methods utilized in evaluating the viability of a project and its alternatives, concepts of replacement decisions, capital- budgeting decisions, and project risk and uncertainty. Students will be exposed to specific issues of economic analysis of the private sector versus the public sector.

Prerequisites: MATH 121

EDUC 210 PRINCIPLES OF EDUCATION *Fall, 3 credit hours GER 3*

This course provides an overview of the historical, sociological, and philosophical foundations of education in the United States. The course examines pedagogy, and the importance of evaluation, assessment, and accountability in education. Policies and practices related to school governance, policies, and finances are explored.

Prerequisites: ENGL 101

ELEC 101 ELECTRIC CIRCUITS I *Fall, 3 credit hour(s)*

This course focuses on direct current (DC) circuit analysis with enough strength to prepare students for upper level courses in the electrical engineering technology program. Students will analyze resistive, capacitive and inductive circuits and laws/theorems including Kirchhoff's Superposition, Thevenin's, Nortons, and Maximum Power Transfer. Students will develop computational skills.

Prerequisites: Pre-Calculus (MATH123) or permission of instructor.

ELEC 102 ELECTRIC CIRCUITS II *Spring, 3 credit hour(s)*

A continuation of Electric Circuits (I), stressing the understanding of AC analysis that involve resistive, capacitive, and inductive circuits. Also, impedance, resonance, filters transformers are covered. Students will analyze circuits of various configurations and enhance computational skills.

Prerequisites: Electric Circuits 1 (ELEC 101) and Pre-Calculus (MATH123) or permission of instructor.

ELEC 109 ELECTRIC CIRCUITS I LAB *Fall, 1 credit hour(s)*

An introductory laboratory course stressing the understanding of basic concepts and principles of direct current/voltage by analyzing resistive, capacitive and inductive circuits through practical laboratory application. Students will also study circuits using circuit analysis software.

Prerequisites: Corequisite: Electric Circuits 1 (ELEC 101) and Pre-Calculus (MATH123) or permission of instructor.

ELEC 129 ELECTRIC CIRCUITS II LAB *Spring, 1 credit hour(s)*

A continuation of Electric Circuits (I) Laboratory, stressing the understanding of AC analysis that involves resistive, capacitive, and inductive circuits. Also, impedance, resonance, filters and transformers are covered. Students will perform ac circuit experiments using laboratory test equipment.

Prerequisites: Electric Circuits 1 Laboratory (ELEC 109) and Pre-Calculus (MATH123) or permission of instructor.

ELEC 141 INDUSTRIAL CONTROLS *Spring, 2 credit hour(s)*

A hands-on study of devices and systems used in the control of industrial machinery. The student is introduced to the theory and use of electromechanical control circuits by use of traditional "hardwire circuits." The programming of the Allen-Bradley Micrologix 1000 type of programmable logic controller (PLC) is practiced. An introduction to sequencer systems that enable complex control and monitoring of machines is given. Emphasis is on learning the ability to program the equipment for effective control.

Prerequisites: ELEC 101/109, ELEC 165 or a basic electricity course (i.e. ELEC 261) with an introduction to three phase systems, basic logic gates, binary and hexadecimal number systems, or permission of instructor.

ELEC 161 ELECTRONIC FABRICATIONS *Fall, 2 credit hour(s)*

Stresses practical fabrication techniques used in electronic and communication industries. Procedures focus on the basics of hand soldering, wiring, installing, testing and troubleshooting methods used in assembly and repair of electronic equipment. Topics include terminating voice, video, and data cables and also design and fabrication of a single sided printed circuit board.

ELEC 165 DIGITAL FUNDAMENTALS & SYSTEMS *Spring, 3 credit hour(s)*

This course covers topics which include: number systems, operations and codes, logic gates, Boolean algebra and logic simplification, combinational logic analysis, functions of combinational logic, latches, flip-flops, timers, counters and shift registers. Semiconductor memories (Eproms, EEproms, and Proms and Drams, etc.) and Digital to Analog/Analog to Digital Converters are also covered.

Prerequisites: ELEC 101, ELEC 109, or permission of instructor.

ELEC 203 ENGINEERING TECHNOLOGY PROJECT *Fall, 1 credit hour(s)*

Senior project (capstone) course that gives the student an opportunity to think, design, construct, and present a finished product based on knowledge/experience from previous or current courses such as electronic circuits, telecommunications, microprocessors, and industrial controls.

Each team is expected to do a classroom presentation on the final project. Examples of design project: High Power Emergency Power Supply (Alternative Energy), Industrial Monitoring System (using sensing devices), and Electronics/Com-

munication Systems. All project proposals must be approved by course instructor.

Prerequisites: Electrical Energy Conversion (ELEC 215), Industrial Controls (ELEC 141), Electronic Circuits (ELEC 231), or permission of instructor.

ELEC 213 MICROPROCESSORS *Spring, 3 credit hour(s)*

The 8085 8-bit instruction set and the internal hardware register are studied. The basic operation of Fetch and Execute operations are examined. The PIC micro family microcontrollers will be introduced to provide the student with hardware and software experience in working with these devices. The student will use a cross- assembler to generate the software programs to be written for the microcontrollers. The RS-232C serial data transmission interface is also studied.

Prerequisites: Digital Systems and Laboratory (ELEC 212/219) or permission of instructor.

ELEC 215 ELECTRICAL ENERGY CONVERSION *Fall, 4 credit hour(s)*

Fundamentals of Electricity, Magnetism, and Circuits related to generation of electrical power are discussed. The study of construction and operation of direct current generators and motors. The principles of operation of three phase induction motors and alternating current generators are presented. Topics also include linear motor and single phase motor principles and operation. Single phase transformer theory, and three phase circuits are also covered. Laboratory experiments are performed to reinforce the theory for each of the covered topics.

Prerequisites: Electric Circuits 2 and Laboratory (ELEC 102/129) or permission of instructor

ELEC 225 TELECOMMUNICATIONS *Fall, 3 credit hour(s)*

An intermediate course designed to give students theoretical and hands-on experience in telecommunications technology. Topics include how information is processed and transmitted, medium of transmission, Switching Hierarchy of North America (PSTN), Wave propagation, Line devices, Modulations, Multiplexing, Noise, Error detection, correction, and control, Transmission lines, ISDN/DSL and Antennas.

Prerequisites: Electronic Circuits (ELEC 231) or permission of instructor.

ELEC 231 ELECTRONIC CIRCUITS *Fall, 4 credit hour(s)*

Basic theory and circuit applications of silicon, germanium, zener, light emitting (LED) and Schottky diodes, bipolar and field effect transistors (FET) is presented. The student is introduced to half wave and full wave DC power supplies and associated ripple filters. Zener and Active

Voltage Regulators circuits are studied. The basic operation of Metal Oxide; Semiconductor Field Effect Transistors (MOSFET) is also presented. Basic types of bi-polar transistor AC amplifiers (CE, CB, CC) and their FET counterparts are discussed.

Prerequisites: Electric Circuits 1 and Laboratory (ELEC 101/109), Electric Circuits 2 and Laboratory (ELEC 102/129) or permission of instructor.

Course Descriptions: Electrical

ELEC 232 INDUSTRIAL ELECTRONICS *Fall, 4 credit hour(s)*

The student is introduced to various electronic components and systems used in modern industry. Operational amplifier principles and applications including comparators (zero and non-zero crossing detectors), voltage followers, inverting and non-inverting amplifiers. Subtraction, summing (mixer), difference and compound amplifiers and active filters.

Operational amplifiers circuits are configured to make up complex analog circuits. Examples of these include the temperature controller and the pulse width modulation technique of DC motor speed control. The importance of digital computers used in modern industrial processes is stressed. Thyristors, photosensitive devices, optically coupled devices, and timer control circuits and various transducers are introduced.

Prerequisites: Electronic Circuits (ELEC 231) or permission of instructor.

ELEC 243 COMPUTER AUTOMATED CONTROL SYSTEMS *Spring, 2 credit hour(s)*

An introduction to some of the control hardware/software systems in use in industry today. The student is introduced to the architecture of the Arduino platform using the ATmega 328P microcontroller to the extent that various control functions can be identified and modified. Programs are developed for computer interfaces for motor-control circuits to provide speed control using the Pulse Width Modulation technique. Programs for stepper motor control using the Pulse Width Modulation technique. Programs for stepper motor interfaces are also developed. Programs are written to implement a digital voltmeter with a PC screen display.

Prerequisites: Electronic Circuits (ELEC 231), Industrial Controls (ELEC 141), Microprocessors (ELEC 213) or permission of instructor.

ELEC 261 ELECTRICITY *Fall/Spring, 4 credit hour(s)*

Fundamentals of direct and alternating current circuits, resistance, inductance, capacitance, magnetism are presented. Also basic machine theory as it applies to both direct and alternating current types is covered. The theory and operation of transformers and the theory of control devices such as relays, contactors and switches is studied.

Prerequisites: College Algebra (MATH 121) or Pre-Calculus Algebra (MATH 123) permission of instructor.

ELEC 332 INDUSTRIAL POWER ELECTRONICS *Fall, 3 credit hour(s)*

This course is designed to prepare students with industrial power electronics skills necessary to function as technologist.

Topics include: Solid States Devices, Photo-Electronics, Inverters, Operational Amplifier circuits including integrator and differentiator applications, Open/Closed Loop Feedback Systems, SCRs, TRI-ACs, Thyristors, Photosensitive devices, Optically Coupled Devices, Motor Direction Control Inverter circuits and techniques used to develop line voltages and frequencies for Variable Speed AC Inductions Motors. Note: Credit is given to a student who has

taken ELEC232 with a (C) grade or better.

Prerequisites: Electronic Circuits (ELEC 231) or permission of instructor.

ELEC 343 ADVANCED CIRCUIT ANALYSIS *Spring, 3 credit hour(s)*

An advanced course designed to give students upper level circuit analysis experience. Topics include: Resistive Circuits, Nodal and Loop Analysis, Two-Port Networks, Application of Laplace Transform. Electric circuit theory is introduced with emphasis on mathematical definitions of circuit elements. Network analysis techniques are presented within the framework of direct and alternating current theory. Transient forced and complete responses of circuits involving resistance, inductance, and capacitance are analyzed via differential and integral calculus. Circuit Design using Operational Amplifiers.

Prerequisites: Electric Circuits II/Lab (ELEC 102/129), Calculus II (MATH 162) or permission of instructor.

ELEC 355 EMBEDDED ELECTRONICS *Fall/Spring, 3 credit hour(s)*

This course is designed to give students theoretical and hands-on experience in Field Programmable Gate Array (FPGA) and Very High-Speed Integrated Circuit Hardware Description Language (VHDL). The course covers the concept and architecture of Programmable Logic Device. The graphic editor of Altera's Quartus Design software and VHDL text editor are used to define digital logic to FPGA.

Prerequisites: ELEC 165 (Digital Fundamentals & Systems), ELEC 166 (Digital Fundamentals & Systems Laboratory) and MATH 123 (Pre-Calculus Algebra) or permission of the instructor.

ELEC 375 FIBER OPTIC COMMUNICATIONS *Spring/Fall, 3 credit hour(s)*

This course focuses on the transmission of information using fiber optics technologies. Topics include: Optical Fiber, Amplifiers, Transmitters, Receivers, Transceivers, Detectors, Modulation, Multiplexing, Optical Networks, Optical Sources and De-modulation

Prerequisites: Electronic Circuits (ELEC 231) or permission of instructor.

ELEC 379 DIGITAL SIGNAL PROCESSING APPLICATION *Spring/Fall, 3 credit hour(s)*

This course introduces the basic concepts and techniques for processing discrete-time signal on a computer using software. Digital Signal Processing (DSP) is concerned with the representation, transformation and manipulation of signals on a computer.

DSP has become an important field, and has penetrated a wide range of application systems, such as consumer electronics, digital communications, medical imaging and so on. By the end of this course, the students should be able to understand the most important principles in digital signal processing (DSP). The course emphasizes understanding and implementations of theoretical concepts, methods and algorithms.

Prerequisites: MATH 162, ENGS 102, ELEC 165, or permission of instructor.

ELEC 380 COMMUNICATION NETWORKS *Fall, 3 credit hour(s)*

This course will cover topics include Network topologies and connectivity devices, TCP/IP protocol suite and internet protocol addressing, networks and sub-networks, network-layer protocols, internet control message protocol, transport layer protocol, internet protocol version 6, configuration and domain name protocols.

Prerequisites: ELEC 225 or permission of instructor.

ELEC 383 POWER TRANSMISSION AND DISTRIBUTIONS *Spring, 3 credit hour(s)*

This course in electrical power generation and transmission will emphasize on those aspects that concern engineers and technologists in the performance of their tasks. Topics covered include: Hydropower, Thermal, Nuclear, and Wind Power Generating Stations, Transmission and Distribution of Electrical Energy, Direct Current Transmission, HVDC Light Transmission System, Power Stability, and Cost of Electricity.

Prerequisites: Electrical Energy Conversion (ELEC 215) or permission of instructor.

ELEC 385 ELECTRONIC COMMUNICATIONS I *Spring, 3 credit hour(s)*

The first of a two series of courses to prepare students for modern telecommunications industry. Topics covered include: Noise, Transmission Lines, Wave Propagations, Error Checking, Communication Transmitters/Receivers, Coding Techniques, and Computer Communications.

Prerequisites: Telecommunications (ELEC 225) or permission of instructor.

ELEC 386 ELECTRONIC COMMUNICATIONS II *Fall, 3 credit hour(s)*

This course is the continuation of Electronic Communications (I), and is designed to prepare students for modern telecommunications industry. Topics include: Wireless digital communications, Optical communications, Cell phone communications, CDMA, OAS, Wireless technologies, Microwave and lasers, Antennas, and Waveguide and Radar

Prerequisites: Electronic Communications I (ELEC 385) or permission of instructor.

ELEC 405 SATELLITE COMMUNICATIONS *Fall/Spring, 3 credit hour(s)*

This course will emphasize on hardware and the basic operating techniques of every major supporting subsystem, the reliability analysis that allow satellites to operate for years without maintenance. Topics include: Propulsion, Structure, Thermal control, Reliability, Spacecraft testing, Spacecraft attitude, System performance, Telemetry, Tracking, and Command.

Prerequisites: Electronic Communications I (ELEC 385) or permission of instructor.

ELEC 416 MICROELECTRONICS CIRCUIT DESGN *Fall, 3 credit hour(s)*

Analyzing and designing analog electronic cir-

Course Descriptions: Electrical, English

cuits, digital electronic circuits, and the foundations of electronic circuit design. Topics covered include: Operational amplifier circuit design, Integrated circuit biasing and active loads. Analysis of differential and multistage amplifiers, Feedback and Stability, and Operational Amplifier Integrated Circuits.

Prerequisites: Industrial Power Electronics (ELEC 332), Electronic Circuits (ELEC 231), or permission of instructor.

ELEC 436 BIOMEDICAL ELECTRONICS

Spring, 3 credit hour(s)

This course is designed to give students theoretical and hands-on experience in biomedical instrumentation and measurement. Topics covered include: Medical Instrument Transducers, Biopotential Amplifiers, The pacemaker, Ultrasonic Equipment, Central Station Monitor, Electroencephalograph and Filtering, Electrosurgical Units and Laser Surgery, and Catheters and Blood Pressure Monitoring Devices.

Prerequisites: Microelectronics Circuit Design (ELEC 416), Calculus II (MATH 162), or permission of instructor.

ELEC 477 CAPSTONE PROJECT

Spring, 3 credit hour(s)

A learning experience by allowing students to propose, design and implement a project. This could be a study of a problem and solution of specific equipment, new product design, improvement of an existing product (re-engineering). All projects must be approved by course faculty or capstone committee. As part of this course, all students must take the exit examination before graduation.

Prerequisites: Completion of seven semesters coursework or permission of instructor.

ELEC 488 ELECTRICAL POWER

Spring, 3 credit hour(s)

This course covers advanced topics in AC and DC transmission such as the per unit concept of transformer and generator analysis, transient stability of power systems etc. Students learn power-flow and economic power dispatch by using both analytical techniques and power system simulators. Basic knowledge of power system control is provided by covering the topics of supervisory control and data acquisition (SCADA), protective relaying etc. This course addresses the energy economics, efficiency and ethics of dynamic pricing and smart meters. This course also delivers topics on smart grid supply that integrate renewable and distributed generation (i.e. photovoltaic and wind).

Prerequisites: Electrical Energy Conversion (ELEC 215), Power Transmission and Distribution (ELEC 383) or permission of the instructor

ELEC/MKTX 216 DIGITAL FUNDAMENTALS & SYSTEMS LABORATORY

Fall, 1 credit hour(s)

This laboratory course emphasizes on topics such as: Adder/Subtraction Circuits, Code Converters, Multiplexers and De-Multiplexers, JK Flip-Flop Circuits, Counters, Timers, Memory devices, Analog to Digital and Digital to Analog Converters, and Digital Circuit Troubleshooting.

Prerequisites: Corequisites: MKTX 215 or Digital Systems (ELEC 165), or permission of instructor.

ENGL 097 INTRODUCTION TO ACADEMIC READING AND WRITING

Fall/Spring, 4 equivalent credit hour(s)

This course is intended to provide the literacy skills required in an academic setting. Students read and respond to a variety of academic texts. The course includes fundamental rhetorical strategies for academic writing with an overview of basic writing mechanics and grammar.

Additional tutorials with class instructor, the Writing Center, EOP and/or Accommodative Service tutors may be required. A minimum grade of C is required for progression to ENGL 101.

ENGL 101 COMPOSITION AND THE SPOKEN WORD

Fall/Spring, 3 credit hour(s)

This course is designed to help students communicate effectively orally and in writing. Students develop critical thinking skills, rhetorical knowledge, basic research skills, knowledge of conventions, and communication ethics.

ENGL 109 APPROACHES TO LITERATURE

Fall/Spring, 3 credit hour(s)

This course is designed to acquaint students with different kinds of literature - plays, short stories, novel excerpts, and poems.

Students are also acquainted with various methods of understanding literature.

Students read a wide variety of literary works and are encouraged to employ proper literary terminology in writing about them. Emphasis rests on intelligent interpretation and argumentation, and on the relationships between literary themes and everyday life.

ENGL 201 WRITING IN THE ARTS & SCIENCES

Spring, 3 credit hour(s)

This course is for students who wish to continue improving their writing skills. They are given the opportunity to read and write about various topics in Humanities, Social Science, Business, Economics, and Science. Using a variety of materials including advertisements, films, television, imaginative and scientific literature, art, newspapers, and journal articles students analyze, investigate, interpret, and formulate ideas through their own writing. Additionally, students further familiarize themselves with the library and research techniques.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of the instructor

ENGL 202 CREATIVE NON-FICTION

Fall/Spring, 3 credit hour(s)

This course provides opportunities for students to continue developing and refining skills in writing from the basics of Expository Writing or Oral and Written Expression. Through their study of Creative Non-fiction forms and conventions— memoirs, nature writing, lyrical essays, magazine features, webpage content, digital or textual literacy narratives, etc.—students learn to write essays that are not only persuasive but enjoyable for both reader and writer. Each student designs writing situations according to interests and develops imaginative essays of creative non-fiction.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of the instructor

ENGL 203 WORLD LITERATURE: B.C. TO 16TH CENTURY

Fall, 3 credit hour(s)

This course examines global literature by tracing patterns of difference and points of contact between literatures developed in various regions throughout the world.

Works read will be discussed in the context of their originating culture as well as in relation to Western modes of understanding literature. Three hours lecture per week.

ENGL 204 WORLD LITERATURE: 17TH TO 20TH CENTURIES

Spring, 3 credit hour(s)

This course examines global literature by tracing patterns of difference and points of contact between literature developed in an era defined by colonial expansion and postcolonial nation building. Works read will be discussed in the context of their originating culture as well as in relation to Western modes of understanding literature.

ENGL 205 SURVEY OF ENGLISH LITERATURE I

Fall, 3 credit hour(s)

This survey course begins with Old English literature from 450 AD and extends through 1800 AD. Students study the primary writers and their representative works. Relevant historical, social, and political background, cultural changes, and developments of each period are also examined.

ENGL 206 SURVEY OF ENGLISH LITERATURE II

Spring, 3 credit hour(s)

This survey course begins with a study of English literature from the Romantic through the Post-Victorian period. Students study the important writers and their representative works. The historical, social, and political background for each period and the cultural changes and developments of the eras is also examined.

ENGL 207 LITERATURE OF THE EARLY AMERICAN REPUBLIC: COLONIZATION AND REVOLUTION, 1640 - 1830

Fall, 3 credit hour(s)

Course is designed to acquaint students with the early emergence of a distinctively American literature. Students explore the roots of American literature and how that literature makes us the Americans we are today. Works by major American writers such as Bradford, Bradstreet, Franklin, Jefferson, Paine, Murray, Wheatley, Sedgwick, Irving, and others comprise the foundation of the course. The historical, social, and political background for each period is examined with a particular eye for the intersections between Native, European, and African voices.

ENGL 208 AMERICAN LITERATURE COMES OF AGE: 1830 - 1920

Fall/Spring, 3 credit hour(s)

This course is designed to acquaint students with significant American authors from the pre-Civil War era and continues to 1920. Students study important American writers such as Whitman, Dickinson, Poe, Melville, Hawthorne, Twain, Jacobs, Freeman,

Course Descriptions: English

Chopin, Cather, Fitzgerald, and others. The historical, social, and political background for each period and the cultural changes and developments of the eras are also examined.

ENGL 211 THE AMERICAN NOVEL OF THE TWENTIETH CENTURY

Fall/Spring, 3 credit hour(s)

This course explores the interaction between historical events, social change, and economic factors that affected the American way(s) of life as they are reflected in the novels of writers such as Edith Wharton, F. Scott Fitzgerald, Ernest Hemingway, John Steinbeck, William Faulkner, Richard Wright, Toni Morrison, Alice Walker, Leslie Marmon Silko, Sandra Cisneros, and others. The novels may be augmented by a variety of print and digital media.

ENGL 213 WAR AND LITERATURE

Fall/Spring, 3 credit hour(s)

Focusing on American wars from World War II to the present, this course examines war and a range of human responses to the war experience as reflected through literature. Theories originating in the social sciences and historical information are included to enhance understanding of the literature.

Prerequisites: Composition and the Spoken Word (ENGL 101)

ENGL 214 CONTEMPORARY AMERICAN FICTION

Fall/Spring, 3 credit hour(s)

Through the writings of current authors, students examine literary trends and their relationship to social, political, cultural phenomena in America. Students are given an opportunity-through their own writing and class discussion to explore contemporary ideas, values, and attitudes expressed in the literature.

ENGL 215 MULTICULTURALISM IN AMERICAN LITERATURE

Spring, 3 credit hour(s)

This course examines multiculturalism in the United States as reflected in its literature of the twentieth and twenty-first centuries. Works will be selected to highlight the diversity of American life including, but not limited to, race/ethnicity, gender, social class, sexual orientation, nationality/immigrant status, religion, and family structure. Students should increase their understanding of the multicultural nature of American society and the existence of cultural traditions and practices that exist independently of those of the dominant American "mainstream" or overculture.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of the instructor.

ENGL 216 CHILDREN'S LITERATURE

Fall/Spring, 3 credit hour(s)

This is a survey course of traditional and modern literature written for young children. Emphasis is on critical appreciation and understanding of literary qualities appealing and valuable to children.

Prerequisites: Composition and the Spoken Word (ENGL 101)

ENGL 217 COMIC BOOKS AS LITERATURE

Fall/Spring, 3 credit hour(s)

Comic books as literature? Certainly, skeptics will scoff at the idea. However, in recent years, comic books have become accepted as a respected form of literature by scholars, critics, and faculty alike. Students in this course examine the academic value of comic books and graphic novels through study of their history, similarity to other forms of literature, their own specialized literary and artistic techniques, and development as compelling narratives.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one literature course or permission of instructor.

ENGL 218 SCIENCE FICTION WORKSHOP

Fall/Spring, 3 credit hour(s)

Students explore the form by reading a wide range of science fiction stories that represent the standard indications of literary quality (i.e. characterization, plot, setting, point of view, style, theme, etc.). After a survey of the form, students write science fiction stories of their own that incorporate the various literary qualities inherent in the genre and constructively respond to peers' writing in a workshop format.

Prerequisites: Composition and the Spoken Word (ENGL 101)

ENGL 219 THE ADIRONDACKS: LIFE AND LITERATURE

Fall/Spring, 3 credit hour(s)

This course provides the opportunity to explore various aspects of life and literature set in the Adirondack forest preserve. A wide variety of readings, films, slides and presentations present the opportunity to sharpen awareness of what the Adirondacks are and how they have shaped and influenced life and literature in America.

ENGL 220 AMERICAN LITERATURE IN THE MODERN ERA: 1920- PRESENT

Fall/Spring, 3 credit hour(s)

This course is designed to acquaint students with significant American authors starting from 1920 and continuing to the present. Students study important American writers such as Baldwin, Steinbeck, Updike, Ginsberg, Roth, Larsen, Hurston, Porter, Millay, Hughes, Plath, and others. The historical, social, and political background for each period and the cultural changes and development of the eras are also examined.

Prerequisites: Composition and the Spoken Word (ENGL 101)

ENGL 221 CREATIVE WRITING

Fall/Spring, 3 credit hour(s)

This course is an introduction to creative writing and its publication. Students hone their written communication skills through the discipline of creative writing, as well as develop a deeper understanding of the literary arts. Emphasis is placed upon the writing of poems and short stories, but other forms of creative work may be utilized and discussed. We cover basic technical problems and formal concepts of creative writing. Students also study works by accomplished writers to see how those writers define and master their craft. At the

end of the semester, students seek publication of their work in various formats.

Prerequisites: Composition and the Spoken Word (ENGL 101) and one literature course Or permission of instructor.

ENGL 224 SURVEY OF NATIVE AMERICAN LITERATURES

Fall/Spring, 3 credit hour(s)

Introductory survey of expressive and essayist literature by selected Native American authors from the United States and Canada. Works are chosen to reflect the diversity of Native American thought and experience as revealed through literature. Emphasis is on contemporary short fiction and poetry, but readings include essays, drama and the novel. Discussion of cultural context encompasses the oral tradition(s) and relevant political and social history. Audio-visual media and Internet resources will supplement lectures and discussions.

Prerequisites: Composition and the Spoken Word (ENGL 101) or permission of instructor.

ENGL 225 AFRICAN AMERICAN LITERATURE

Fall/Spring, 3 credit hour(s)

This course focuses on African American authors from the Colonial Era to the present. Topics to be covered include recurring themes and concerns, cultural pressures, historical contexts, intellectual currents and literary innovations. Students study major African American writers such as Zora Neale Hurston, Richard Wright, Langston Hughes, Rita Dove, Toni Morrison, Alice Walker, James Baldwin and others.

Prerequisites: Composition and the Spoken Word (ENGL 101)

ENGL 264 LIVING WRITERS SERIES

Fall/Spring, 3 credit hour(s)

Students read and discuss works by a selected group of contemporary authors. After reading a given work, students meet and engage authors in a question and answer session followed by a public reading. This course includes an introduction to close reading skills, analysis of the elements of literary style in fiction, poetry, and creative non-fiction. Through intensive class discussion, writing workshops, and oral presentations, the students learn how to articulate ideas clearly and are introduced to the basic elements of creative writing in multiple genres.

Prerequisites: Composition and the Spoken Word (ENGL 101); or permission of instructor.

ENGL 265 WRITING IN THE HUMANITIES THEMATIC INQUIRY

Fall/Spring, 3 credit hour(s)

Students explore questions about the humanities and will introduce students to several disciplines within the humanities. Through writing about a common theme, students will analyze, evaluate, and interpret texts, films, art and/or music that reflect this common theme. Citation and integration of external sources will be expected. This is a writing intensive course for students in General Studies or for students interested in transferring to a liberal arts program, especially in the humanities.

Prerequisites: Composition and the Spoken Word (ENGL 101); completion of 24 credits towards the major of General Studies; or permission of instructor.

Course Descriptions: English

ENGL 266 **THE MODERN ISLAMIC WORLD** **THROUGH FILM AND LITERATURE** *Fall/Spring, 3 credit hour(s)*

This course introduces the student to the history, cultures, and politics of the modern Islamic world with a special emphasis on film and literature. Readings include poets such as Rumi and Hafiz as well as novelists such as Mahfouz and Farah. Films include those of such Persian and Arab directors as Majidi, Kiarostami, and Chahine.

Prerequisites: Composition and the Spoken Word (ENGL 101)

ENGL 267 **MASCULINITY STUDIES IN AMERICAN** **LITERATURE AND CULTURE** *Spring, 3 credit hour(s)*

This course explores the ways in which gender – and in particular – the broad concept of masculinity, arises from and impacts American literature and culture. Students will examine novels, short stories, creative nonfiction, theatrical productions, and films, as well as excerpts from prominent gender studies scholars. Students should increase their understanding of how masculinity functions and shapes American culture, as well as develop a critical and theoretical lens when it comes to reading and interpreting literary works. Through the study of masculinity and masculinities, students should leave the course with nuanced knowledge of the complex implications of gendered men and women.

Prerequisites: Composition and the Spoken Word (ENGL 101)

ENGL 270 **MEDIA WRITING** *Fall, 3 credit hour(s)*

This course introduces the creative practices and theories of writing/designing for various electronic and digital media platforms. Through critical practice, students learn to integrate concepts and techniques in order to produce portfolio websites, illustrated proposals, presentations, and digital games for various public audiences. Class workshops and collaborative projects focus on writing and software skills; research, design and technical resources; and issues such as copyright/fair use. Students learn digital communication skills by utilizing industry design frames like CAT (Conceptual, Aesthetic, Technical), experience design use-experience, information design, and information architecture, which then serve as building blocks for subsequent technological communications courses.

Prerequisites: Composition and the Spoken Word (ENGL 101)

ENGL 301 **PROFESSIONAL WRITING AND** **COMMUNICATION** *Fall, 3 credit hour(s)*

In this course students will advance their communication skills for the global marketplace. Emphasis is on technical writing, business writing, and publishing. Students design and produce technical documents, including, but not limited to, job-search documents, memos, reports, and proposals, responding to specific audiences and purposes in the business world.

Students should be familiar with desktop publishing and electronic presentations.

Prerequisites: Composition and the Spoken Word (ENGL 101) and junior status with a 2.0 GPA; or permission of instructor.

ENGL 302 **GLOBAL ENGLISHES** *Fall, 3 credit hour(s)*

This course provides opportunities for students to deepen their understanding of the English language: its history, its status and functions in different areas of the world, and its variations. Promoting an inclusive and pluralistic concept of Englishes rather than the inaccurate notion of a singular English, students develop explicit knowledge about how language works, and how people learn and use language not only as a tool for communication but as a component of social and cultural identity. Students emerge from this course better equipped to navigate situations requiring crosscultural communication at the university and beyond.

Prerequisites: Composition and the Spoken Word (ENGL 101) and 45 credit hours.

ENGL 304 **LGBTQ LIVES AND LITERATURE** *Fall/Spring, 3 credit hour(s)*

In this course, students examine social, cultural, and political themes in the histories of individual lives as well as communities that are categorized as "LGBTQ": lesbian, gay, bisexual, transgender, and queer (a term that is by nature flexible and which is used by many who feel that they in some way fall outside of "norms" of gender identity, gender expression, and/or sexual orientation). Focusing mainly on literature from the U.S. and the United Kingdom, works from the genres of short story, poetry, the novel, creative nonfiction, theatrical productions, and film are supplemented by information and insights offered by an anthology of critical essays as well as texts harvested from contemporary news sources.

Prerequisites: Composition and the Spoken Word (ENGL 101) and 30 credits earned.

ENGL 305 **PERPETRATORS & VICTIMS: CRIME AND** **VIOLENCE IN LITERATURE** *Fall/Spring, 3 credit hour(s)*

Students examine the impact of crime and violence in American culture as reflected in literature. Analysis focuses on both perpetrators and victims of crime and violence. Literary genres may include, but are not restricted to, True Crime, fiction, memoir, the graphic novel, and poetry.

Prerequisites: Composition and the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

ENGL 306 **IRISH PRISON LITERATURE** *Fall/Spring, 3 credit hour(s)*

This course uses works of literature to assist students' understanding of Ireland, the British Empire and the history of modern imprisonment. Along with the church, the university and the army, the prison is one of the central institutions in Irish History, and literature has traditionally been a means by which prisoners protest, resist, and critique their harrowing experiences. This course examines work written by men and women during and after their incarceration.

Prerequisites: Composition and the Spoken Word (ENGL 101); completion of 45 credit hours with a minimum 2.0 GPA

ENGL 307 **DISABILITY AND LITERATURE** *Spring, 3 credit hour(s)*

In this course students will be introduced to Historical and contemporary poetry, short stories, novels, memoirs, and other fiction and non-fiction life writings are analyzed for portrayals of people who have physical, developmental, or mental health impairments and/or disabilities. Topics include historical changes in what is considered "normal," stereotypes as limiters of opportunity, comparison of literary portrayals of disability with reality as presented in autobiographical narratives, and others. An overview of the medical and social construction models of disability is included.

Prerequisites: Composition and the Spoken Word (ENGL 101) and one literature course AND 30 credit hours earned

ENGL 309 **JOURNALISM** *Fall/Spring, 3 credit hour(s)*

This course provides a general introduction to journalistic principles and practice in gathering and writing news. Students write a variety of news story types with the goal of developing an array of publishable writing samples to present at a job interview. Fundamentals of English grammar and mechanics are reinforced through regular editing exercises. Ethical issues related to mass media are considered. Online journalism is explored, as well as alternative forms of media writing, including broadcast writing, advertising and public relations.

Prerequisites: Composition and the Spoken Word (ENGL 101) and junior status or permission of the instructor.

ENGL 310 **WRITING YOUR LIFE: FORM &** **FUNCTION IN MEMOIRS** *Fall/Spring, 3 credit hour(s)*

Memoirs are an author's commentary on his or her life, experiences, and the times he or she lives in. Writers record important events based upon their own observations and knowledge of events and/or personalities that they feel have significantly influenced their lives. In this writing intensive course, students study a variety of literary forms within the memoir genre, and they create memoirs of different forms from their own life experiences. Students recognize that both concrete details and abstract ideas in memoirs represent universal truths and create poems and stories that reflect both.

Prerequisites: Composition and the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

TCOM/ENGL 310/311 **IDENTITY IN THE DIGITAL AGE** *Fall, 3 credit hour(s)*

Students explore theories of identity and their evolution in the digital era, noting how self-presentation has changed through the use of multi-media communication, and how social interaction in digital spaces has changed. In the course, students read and interpret multi-media texts, noting how image, sound, and language affect self-presentation. The course closes with an applied learning unit in which students employ ethnographic methodologies to explore identity in digital spaces.

Prerequisites: ENGL 101

Course Descriptions: English

ENGL 315 SHORT FICTION: THE ART OF THE TALE *Fall/Spring, 3 credit hour(s)*

The short story genre is explored by reading selections from various writers around the world. Students also write their own short stories in order to gain perspective on the literary form of the short story, the range of ideas expressed within that form, and the creative process used to produce that form.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one lower-level literature course AND 30 credit hours earned.

ENGL 317 WORLD POETRY *Fall/Spring, 3 credit hour(s)*

Students in this course explore the vast wealth of non-Western poetry. We draw from the historical canon of writings, but we have distinctly modern concerns in this class; our wide reading helps us understand divergent (and poetic) cultural issues, such as Japanese anime cartoons, Islamic worldviews, global hip hop and graffiti, and post-colonial literature. While all our readings will be in English, our consideration of the linguistic and political concerns of translation allows us to analyze the dynamic interchange between local cultures and globalization.

Prerequisites: Composition and the Spoken Word (ENGL 101) and one lower-level literature course, or permission of instructor.

ENGL 320 NATIVE AMERICAN AUTOBIOGRAPHY *Fall/Spring, 3 credit hour(s)*

This course is a survey of the means by which Native American people have recorded their lives. Texts are selected from pre-contact pictorial and oral auto/biographical narratives through contemporary written texts, film, and electronic media. Historical context is provided in lecture materials. Emphasis is on works published since 1980.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one literature course AND one lower level literature course AND 30 credit hours earned with a cumulative GPA of 2.0 or permission of the instructor.

ENGL 321 GHOSTS AND THE UNDEAD: RACIAL HAUNTINGS IN AMERICAN LITERATURE *Fall/Spring, 3 credit hour(s)*

This course focuses on ghosts and the undead in contemporary American literary texts. The specters in these texts are not only individuals, but they are at once collective, historical, and socio-political representations of violence and racism in American culture. The haunting events we discuss in this course include slavery, the colonization of native people and lands, the Jim Crow south, and the memories of atrocities that travel with immigrants to North America. This course asks,

how do the undead represent racial violence in these texts? Why are some places and landscapes more haunted than others?

How might we escape the ghostly hauntings of the past? Students study major American writers and artists such as Ralph Ellison, Toni Morrison, Octavia Butler, Jesmyn Ward, Louise Erdrich, Christina Garcia, Edwidge Danticat, and filmmaker Jordan Peele.

Prerequisites: ENGL 101

ENGL 325 CONTEMPORARY YOUNG ADULT LITERATURE *Fall/Spring, 3 credit hour(s)*

This course is an exploration of contemporary young adult novels as a genre of literature. Of particular interest is the historical development, current trends, enduring characteristics of young adult literature and its influence on readers. Various works are analyzed according to critical perspectives. Readings will include a number of subgenres, i.e. adventures, mysteries, humor, fantasy, science fiction, the people and places of history, and modern social issues.

Prerequisites: Composition and the Spoken Word (ENGL 101), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

ENGL 340 AMERICAN WOMEN WRITERS *Fall/Spring, 3 credit hour(s)*

Course is designed to acquaint students with significant American women writers, such as Wheatley, Bradstreet, Harper, Dickinson, Alcott, Gilman, Stowe, Yeziarska, Wharton, Stein, Moore, Sexton, Plath, Cisneros, Morrison, Erdrich, and others. The historical, social, and political backgrounds for each author and their works are also examined, with an introduction to basic concepts of cultural criticism and gender studies. Works are selected to highlight the diversity of American women, including, but not limited to, race/ethnicity, gender, social class, sexual orientation, nationality/immigration status, religion, and family structure. Focus can be multi-genre or on one specific genre, at the direction of the instructor. Three hours lecture per week.

Prerequisites: Composition and the Spoken Word (ENGL 101) and completion of at least 45 credit hours or permission of instructor.

ENGL 349 CLASSIC DETECTIVE FICTION *Spring, 3 credit hour(s)*

This course explores the genre of detective fiction from its origins in the nineteenth century to the present day. Course content and time periods may vary by semester.

Students learn literary elements of detective fiction, examine the development of the detective as a literary figure and detective fiction as a genre, and analyze depictions of the law and legal system. Course may include, but is not limited to, British and American detective fiction by Poe, Collins, Conan Doyle, Chesterton, Sayers, Hammett, Christie, Chandler, MacDonald, James, Rendell, Cross, Elizabeth Peters, Ellis Peters, Perry, George, and King.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one lower-level literature course AND 45 credit hours earned.

ENGL 350 FLASH FICTION *Fall/Spring, 3 credit hour(s)*

The Flash Fiction story (also called short- shorts; micro; sudden; or lightning fiction) lies somewhere between prose and poetry. Students taking this course explore the form by reading a wide range of Flash Fiction stories that represent the best in terms of literary quality (i.e. characterization, plot, setting, point of view, style, theme, etc.), and by creating stories of their own that incorporate the various

literary qualities inherent in the genre.

Prerequisites: Composition and the Spoken Word (ENGL 101) AND one literature course AND 30 credit hours earned OR permission of the instructor.

ENGL 351 ADVANCED FICTION WORKSHOP *Spring, 3 credit hour(s)*

This course is a writing intensive fiction workshop where students hone the knowledge and skills they have developed in previous creative writing and literature courses. As an advanced workshop this course is intended for students already producing oral and written feedback on the writing of their peers in a workshop setting. Students produce multiple works of fiction over the course of the semester which are revised and submitted in a final portfolio. At the end of the course, students seek publication of their work.

Prerequisites: ENGL 221 Creative Writing OR ENGL 315 Short Fiction: Art of the Tale OR ENGL 350 Flash Fiction, OR permission of the instructor.

ENGL 380 INTERCULTURAL COMMUNICATION *Fall/Spring, 3 credit hour(s)*

This course is designed to advance students' intercultural communication skills necessary in a multicultural global marketplace. The focus is on oral, nonverbal, and written communication patterns across cultures, diverse cultural values, global etiquette, business and social customs, and intercultural negotiation models.

Prerequisites: Composition and the Spoken Word (ENGL 101) and completion of 45 credit hours, or permission of instructor.

ENGL/TCOM 200 NARRATIVE FORM IN VIDEO GAMES *Spring, 3 credit hour(s)*

Students explore the evolution of narrative, from basic concepts to interactive fiction and interactive storytelling to early text-based adventures and recent open-world storytelling. Students review several philosophies on interactive narrative.

Students also experience and discuss interactive fiction and storytelling through game case studies, including required playthroughs and subsequent discussion. As a course capstone, students will develop interactive fiction or storytelling through ADRIFT or other available programs.

Prerequisites: ENGL 101 Composition and the Spoken Word

ENGL/TCOM 314 DIGITAL GRAPHIC STORYTELLING *Spring, 3 credit hour(s)*

This course explores the graphic narrative through the digital medium. Students explore the literary, architectural, interactive, and design elements of graphic narratives by reading and engaging novels, memoirs, and narrative games written from the 1970s to the present. In order to create effective graphic narrative texts, students critique several germinal graphic works and then apply their knowledge of this visual medium to their own narratives. The class will design original graphic works in various software platforms (Google Earth, Comic

Course Descriptions: English, Engineering Science

Life, InDesign, Pixton, Comic Maker) using both literary and design frameworks. Units include: memoir, graphic medicine, digital/online comics, and interactive narrative games. Through close textual analysis, peer critique, and iterative thinking/practice, students learn to create digital projects that use image/text to tell stories and analyze literature. Projects may include: digital theory comix, graphic essays, graphic narrative maps in Google Earth, and video essays. Course texts may include works by Alison Bechdel, Miriam Libicki, Scott McCloud, Nam Le, Chinese Room, The Fulbright Company, Simogo, and 11 Bit Studio. Prerequisites: ENGL 101

ENGL/TCOM 322 MOBILE MEDIA STORIES AND GAMES *Spring, 3 credit hour(s)*

Students explore the emerging practices and transformative potential of mobile media storytelling and games. The site-specificity of mobile media through GPS capabilities allows us to connect media to location; stories become part of the spaces in which they unfold and are created. In this course students examine the ways that written and visual narratives, maps, and interactive digital experiences structure knowledge in physical and virtual space. The first half of the course is spent reading, interacting with, and assessing existing location-based texts and games such as interactive webstories, electronic performance theater, and augmented reality games. Students examine these works through a literary framework as well as through two design frameworks: CAT (conceptual, aesthetic, technical) and UX (user experience, experience design, information architecture, and information design). In the second half of the course, students apply the conceptual and aesthetic principles learned in the first half of the course in order to build experimental GPS-based locative games and stories. The course consists of weekly discussion classes, workshops, and demo studios. Students design original mobile works in various software platforms such as Google Earth, ARIS, and Siftr. Through literary and locational analysis, peer critique, and iterative thinking/practice, students learn to create original mobile stories and games.

Projects may include: critical hacktivist games, graphic narrative maps in Google Earth, and mobile stories in ARIS and Siftr.

Prerequisites: ENGL 101 Composition and the Spoken Word or permission of instructor.

ENGL/TCOM 345 ELECTRONIC LITERATURE: FROM CYBERTEXT TO VIDEO GAMES *Spring, 3 credit hour(s)*

In this course students explore the practices and theories of screen-based literature by tracing the transformation of electronic literature from hypertext fiction to augmented reality stories to massive online games (MMOGs). The first half of the course is spent reading, interacting with, and assessing existing hypertext fiction and early indie computer games such as *Afternoon, A Story*. The second half of the course allows students to experience more immersive stories such as augmented reality documentaries, interactive fiction, hacktivist narrative games, and cooperative MMOGs. Students apply conceptual and aesthetic principles to build experimental stories and games in various platforms such as Twine, ARIS, Unity, and Siftr.

Prerequisites: ENGL 101

ENGL/TCOM 370 ARTIFICIAL INTELLIGENCE AND COMMUNICATION

Fall/Spring, 3 credit hour(s)

In this interdisciplinary course, students advance their Artificial Intelligence (AI) literacy and communication skills in the age of AI. Students explore the intricate interplay between AI, the humanities, ethics, and personal expression. Students acquire a deeper understanding of the history and applications of Artificial Intelligence through various readings from a non-technical point of view. Students analyze human-AI interactions through a humanistic lens and apply research skills to delve into the ethical dimensions of Generative AI, including Chatbots' hallucinations, bias, data privacy, copyright, and more. Students apply various writing techniques to forge a distinctive writing voice with or without AI assistants. NOTE: Chatbots are a type of AI using a large language model to generate human-like content (e.g., ChatGPT).

Prerequisites: ENGL 101

ENGM 101 INTRODUCTORY MATHEMATICS FOR ENGINEERING APPLICATIONS

Fall/Spring, 3 credit hour(s)

This course provides an overview of the salient math topics most heavily used in the core sophomore-level engineering and engineering technology course. These include algebraic manipulation of engineering equations, trigonometry, vectors and complex numbers, and system of equations. All topics are presented within the context of engineering application, and reinforced through extensive examples of their use in the core engineering or technology courses.

Prerequisites: MATH 106 or permission of instructor

ENGS 101 INTRODUCTION TO ENGINEERING *Fall, 2 credit hour(s)*

The course introduces students to the various engineering disciplines, professional organizations and ethical aspects of professional expectations. Engineering analysis introduces problem-solving, engineering computations, manual sketching, and work presentation. Hands-on challenges engage the student in the design process, team work and critical thinking. Local expectations regarding written communication and oral presentations are presented and reinforced through projects.

Prerequisites: None. Co-requisites: MATH 123 or MATH 121 or higher, or permission of instructor.

ENGS 102 PROGRAMMING FOR ENGINEERS *Fall/Spring, 2 credit hour(s)*

This course introduces computer programming using equation solving software. Students will learn the skills necessary to create predictive models and solve basic engineering problems as well as methods for graphically presenting results and data using said software. The skills taught will assist in the analysis of engineering problems in more advanced course work.

Prerequisites: MATH 161, Co-requisites: PHYS 121 or PHYS 131

ENGS 201 STATICS *Fall, 3 credit hour(s)*

A vector approach to particle equilibrium, equivalent force systems, rigid body equilibrium and analysis of structure. Additional topics include friction, centroids and centers of gravity and moments of inertia.

Prerequisites: PHYS 131 and MATH 161

ENGS 202 DYNAMICS *Spring, 3 credit hour(s)*

This course is a vector approach to the solution of dynamics problems involving rectilinear motion, curvilinear motion, kinetics of particles, kinematics of rigid bodies, and plane motion of rigid bodies. Newton's laws, work-energy principles and impulse and momentum principles are used in the solutions. Three hours lecture per week.

Prerequisites: ENGS 201 or permission of instructor.

ENGS 203 ENGINEERING STRENGTH OF MATERIALS *Spring, 3 credit hour(s)*

This course is designed to introduce elementary analysis of deformable bodies subjected to various loading including strength, deformation, and stability analyses. Students will also be introduced to more advanced concepts to use sound judgment regarding the design of structures and components.

Prerequisites: ENGS 201, or permission of instructor

ENGS 205 MATERIALS SCIENCE *Fall, 3 credit hour(s)*

The underlying atomic and crystalline structure of materials is studied and how these structures affect their engineering properties. The mechanical properties of metals, ceramics, polymers and composites are examined. The mechanism of Diffusion & strengthening are discussed. Gain knowledge about the types of imperfections that exist and the roles they play in affecting the behavior of materials. Phase Diagrams of some alloys are studied.

Prerequisites: College Chemistry I (CHEM 150), University Physics II (PHYS 132), and Calculus II (MATH 162), or permission of the instructor.

ENGS 263 ELECTRIC CIRCUITS *Spring, 3 credit hour(s)*

Electric circuit theory is introduced with emphasis on mathematical definitions of circuit elements. Network analysis techniques are presented within the framework of direct and alternating current theory. Transient forced and complete responses of circuits involving resistance, inductance, and capacitance are analyzed via differential and integral calculus. Circuit Design using Operational Amplifiers.

Prerequisites: Calculus II (MATH 162), University Physics II (PHYS 132), or permission of instructor.

ENGS 264 ELECTRICAL CIRCUIT LABORATORY *Spring, 3 credit hour(s)*

Basic concepts and principles of direct current and DC voltage are stressed in this introductory laboratory. Students will analyze resistive, capacitive

Course Descriptions: Engineering Science, Earth Science, Esports Mgmt.

and inductive circuits through practical laboratory application. Students will also study circuits using circuit analysis software.

Prerequisites: PHYS 132/136 University Physics II/Lab. Corequisites: ENGS 263 Electric Circuits

ENGS 302 ENGINEERING DYNAMICS II *Fall, 3 credit hour(s)*

In this second dynamics course, students learn about planar two-Dimensional rigid body kinematics, kinetics of rigid bodies- force and acceleration, work and energy, impulse, momentum, and three-dimensional motion. An introduction to vibrations is also provided.

Prerequisites: ENGS 202 or MECH 301

ENGS 314 FLUID MECHANICS I *Fall, 3 credit hour(s)*

This course develops knowledge of fluid mechanics. Topics include properties of fluids, pressure, hydrostatic forces, fluid statics, Bernoulli's, and the energy equation are explored in respect to applications in the mechanical and civil industry. Flow rate, pipe sizing, and minor losses in piping systems are addressed.

Prerequisites: MATH 123, PHYS 121 or PHYS 131

ENGS 341 THEORETICAL FLUIDS *Fall, 3 credit hour(s)*

Students in this course develop knowledge of fluid mechanics under static and dynamic applications. Properties of fluids, pressure, fluid statics, Bernoulli's, fluid kinematics, differential representation of conservation of mass and momentum, dimensional analysis, flow rate, minor losses in piping systems, and an introduction to the Navier-Stokes equations are addressed.

Prerequisites: ENGS 201 and MATH 364

ENGS 350 MECHANICS OF MACHINE ELEMENTS *Fall, 4 credit hour(s)*

Students in this course will develop fundamentals of mechanics of machine design skills. Students apply their knowledge of statics, strengths, and materials to the designing of machine components.

Prerequisites: MECH 151, ENGS 203 & Junior

ENGS 450 ADVANCED MACHINE DESIGN *Spring, 3 credit hour(s)*

Students in this course will develop advanced level of mechanics of machine design skills. Students apply their knowledge of machine design and learn tolerance and fits, tapered roller bearings, plain surface bearings, linear motion elements, machine bolted connections, motor control, clutches and brakes and do design projects.

Prerequisites: ENGS 350, Junior/Senior

ESCI 101 INTRODUCTION TO ENVIRONMENTAL SCIENCE *Fall/Spring, 3 credit hour(s), GER 2*

This course is divided into five major sections: Resources/Human Population, Matter/Energy, Ecology, Environmental Law/Economics and Risk, and Environmental Degradation. Resources/Human Population will include resources types,

alternative energy sources, and human population dynamics. Matter/Energy will include the basic principles of matter and energy from a physics and/or chemistry perspective in preparation for the Ecology and Environmental Degradation sections. Ecology will include ecosystem basics, land ecosystems, and aquatic ecosystems. Environmental Law/Economics and Risk will include major laws dealing with pollution discharge/cleanup, treatment of pollution and an economic commodity, risk, and toxicology principles. Environmental Degradation will include water resources, sewage treatment, air pollution, and hazardous/solid waste. Three hours lecture per week.

Prerequisites: MATH 100, ENGL 101, or an 80 on the NYS ELA Examination, or permission of instructor.

ESCI 102 INTRODUCTION TO ENVIRONMENTAL SCIENCE LAB *Fall/Spring, 1 credit hour(s), GER 2*

This laboratory is designed to provide scientific laboratory experiences using environmental issues as a data source or focus. Each exercise involves the collection of data, manipulation of the collected data, and analysis of the data. The experiments include energy conservation, chemical toxicology, river/stream attributes, pond morphology, design of private sewage systems, evaluation of solar/wind power potential, solid waste/composting, and the evaluation of the distribution of an environmental contaminant. Two hours per week.

Prerequisites: MATH 100, ENGL 101, or permission of instructor. Co-requisite: ESCI 101, or permission of instructor. Recommended Math Level - MATH 106.

ESCI 107 EARTH SCIENCE *Fall/Spring, 4 credit hour(s)*

This course introduces earth processes and phenomena. The birth of the universe, our solar system, and the earth are explored. The internal composition and structure of the Earth is studied. Factors that affect the structure of the earth are examined: continental drift, plate tectonics, and crustal deformation. Students learn about common earth materials that make up the Earth. The impact of weathering, erosion, running water, and glaciers on the earth's surface and landforms is studied. Additional topics will include, but are not limited to: earthquakes, volcanoes, mass movement, geologic time, and geologic mapping. Lecture related exercises/assignments, laboratory exercises, readings, and review questions help students learn and understand the course material. This course includes a laboratory section. Students cannot receive credit for both ESCI 107 and GEOL 101.

ESCI 110 INTRODUCTION TO METEOROLOGY *Fall/Spring, 3 credit hour(s)*

This is an introductory meteorology course with topics covering the structure of the atmosphere, meteorological measurements, air movement, air masses and fronts, violent storms and climate. No prerequisites.

ESCI 320 WEATHER, CLIMATE, AND CLIMATE CHANGE *Spring, 3 credit hour(s)*

This course is an introduction to the science behind weather and climate. It will focus on the composition, structure, and disturbances of the atmosphere. The energy balance and role of water will necessarily include discussions of solar radiation and the water cycle. The difference between weather and climate will be illustrated with a discussion of global climate change. The most current reports from the UN Intergovernmental Panel on Climate Change (IPCC) and the US Global Change Research Program (USGCRP – National Climate Assessment) will be reviewed.

Prerequisites: One semester college level science

ESOL 096 ACADEMIC COMMUNICATION *Fall/Spring, 4 credit hour(s)*

This course is designed to help first- semester international or English language learners to enhance communication skills required in American academic contexts. Students will develop critical reading skills and academic writing skills with an overview of grammar and mechanics.

Concurrent focus is on building oral fluency and expanding academic vocabulary. This course is an alternate to ENGL 097 or ENGL 098 for ESL students.

Prerequisites: Leveled by placement test score

ESPT 100 INTRODUCTION TO ESPORTS MANAGEMENT *Fall, 3 credit hour(s)*

This course introduces students to eSports and the fundamentals of effective eSports management. Students identify best practices in eSports management by examining case studies of the emerging eSports industry and associated stakeholders. Students explore financial, legal & ethical, marketing, and operational issues surrounding the eSports industry.

Finally students explore career opportunities in eSports management

ESPT 200 FUNDAMENTALS OF ESPORTS TECHNOLOGY *Spring, 3 credit hour(s)*

This course introduces students to esports technology and the fundamentals of effective esports technology usage. Students identify best practices in esports technology through hands-on experience with industry- leading software. Students explore streaming, editing, hardware, and more.

ESPT 210 ESPORTS GOVERNANCE *Spring, 3 credit hour(s)*

This course introduces students to governing bodies and regulatory structures of Esports organizations. Students explore the structure and function of eSports governing bodies, including but not limited to: BEA, ESL, IESF, NACE, and NEA. Students also explore player bill of rights, rule sets, and conference governance structures for leagues, including but not limited to CDL, OWL, and LCS.

Course Descriptions: Esports Mgmt., FLHT, French, Funeral Services

ESPT 300 **ESPORTS CONTENT CREATION AND SHOUTCASTING**

Fall, 3 credit hour(s)

In this course, students explore the fundamentals of content creation for Esports, including video production, streaming, and social media engagement. Students further explore the art of shout-casting, learning the techniques needed to provide engaging and informative live commentary during Esports events.

Prerequisites: ENGL 101 and 45 credits earned

ESPT 301 **ESPORTS MARKETING**

Spring, 3 credit hour(s)

Students explore contemporary marketing practice and marketing career opportunities in the eSports industry. Students use marketing concepts gained in BSAD 203 Marketing to examine marketing initiatives and corresponding efficacy in eSports marketing practice. Students select an existing eSports entity, develop a marketing plan, and propose ways to improve the entity's marketing efficacy. The course culminates in the presentation and defense of the student's marketing plan.

Prerequisites: BSAD 203 Marketing

ESPT 305 **ESPORTS MANAGEMENT PRACTICUM**

Fall, 3 credit hour(s)

In this course, students gain hands-on experience working with an eSports entity in an eSports management capacity. Students document their practicum activity and highlight characteristics of effective management eSports operations. Weekly class lectures allow students to share their practicum experience and debrief on the week's activities. Students build a professional portfolio and career plan based on their practicum experience.

Prerequisites: ESPT 200, ESPT 210, and 45 credit hours earned

ESPT 308 **APPLIED ESPORTS EVENT MANAGEMENT**

Fall, 3 credit hour(s)

ESPT 308 plunges students into the fast paced world of live competitive gaming by making them the architects of a public Esports tournament that must launch before the semester ends. From the first class meeting, students form an internal production company that conceives the event concept, drafts the rule book, recruits teams and sponsors, designs the bracket, builds the broadcast package, and markets the competition across social channels.

Industry guest speakers and weekly case studies deliver best practice insights that students immediately integrate into their own project workflow. As match day arrives, the class directs the live stream, updates real time scoreboards, resolves competitive disputes on the fly, and manages on air talent to ensure a seamless viewer experience both online and on site. The course finishes with a data driven post mortem in which students analyze audience metrics, assess operational performance, and present recommendations for future iterations. By the semester's close, every student holds a résumé ready portfolio that proves they can plan, promote, and execute a full scale Esports event from concept to final whistle.

Prerequisites: 45 credits earned or permission of instructor

ESPT 404 **ADVANCED ESPORTS MANAGEMENT**

Spring, 3 credit hour(s)

This multidisciplinary course integrates concepts from Business, Management, and Esports Management. Students apply the skills acquired in their core Esports and Business Management coursework to develop a strategy for the formation of an Esports entity. Students analyze and evaluate advanced issues in governance, innovation, marketing, management, and Esports technology faced by contemporary Esports organizations. The course culminates in the production of a branded Esports event.

Prerequisites: ESPT 308 and 90 credits earned; or permission of the instructor

ESPT 450 **INTERNSHIP FOR ESPORTS**

Fall/Spring, 3 credit hour(s)

Working in conjunction with a field supervisor, the student performs delegated work within an administrative and management setting. This is a culminating experience in which the student is expected to integrate concepts gained in previous program course work. The internship will be individualized according to the career interests of the student and the needs of the supervising organization. Internship assignments may include information gathering, analysis, planning, implementation, evaluation, and other responsibilities.

Prerequisites: Senior level status. Completion of all required ESPT courses before participation in Internship, permission of curriculum coordinator or Dean required.

FLHT 101 **INTRODUCTION TO DRONES: REGULATIONS & USE**

Fall/Spring/Summer, 2 credit hour(s)

This course is designed to give students an introduction to drones and to prepare them for the remote drone pilot exam. The course covers the five knowledge areas on the exam, which are regulations, the national airspace system, weather, loading and performance, and operations.

FREN 101 **CONTEMPORARY FRENCH I**

Fall, 4 credit hour(s), GER 9

This course will introduce the student to the sound system and grammatical structure of the French language. The focus will be on developing skills in the areas of aural comprehension, speaking, reading, and writing. By the end of the semester the student will have a basic understanding of grammar, including word formation, verb conjugations, idiomatic expressions, and cognates. This course will also discuss various cultural aspects of the French-speaking world. This course is only for the true beginner or for students who have had less than three years of high school French. Students who have taken more than three years of high school French within the last three years can enroll in this course only with the permission of the instructor. Four lecture hours per week.

FSAD 101 **INTRODUCTION TO FUNERAL SERVICES**

Fall/Spring, 1 credit hour(s)

This course is designed to introduce the student to basic terminology, concepts and professional expectations relating to funeral services. Each student

will develop and understanding and comply with the licensing requirements with New York State Department of Health, Bureau of Funeral Directing, as well as learning about the program's expectations. Students will become proficient in a collegiant writing style while learning research techniques from various sources.

FSAD 111 **STUDY OF FUNERALS**

Fall, 3 credit hour(s)

This course discusses the role of funeral directors and other death-related professions in contemporary American Society. Terminology, duties, and responsibilities of the funeral director during the removal of deceased, the wake, funeral, and committal service are extensively covered. Historical methods of preservation and memorializing the dead will be reviewed and discussed. Various religious and ceremonial responses to death and loss are reviewed. Students review historical and present day funeral customs in this and other countries. Each student reviews his or her own personal response to death and pre-arrange his or her own funeral and/or burial. Each student writes an obituary for themselves or someone they know. Three hours lecture per week.

FSAD 115 **THANATO-CHEMISTRY**

Fall, 2 credit hour(s)

This course provides a survey of the basic principles of chemistry as they relate to Funeral Service. The focus is on the chemical principles and interactions involved in sanitation, disinfection, public health, and embalming practice.

Prerequisites: Enrollment in the Funeral Services Administration program, or instructor approval.

FSAD 121 **ANALYTICAL EMBALMING**

Fall/Spring, 2 credit hour(s)

This is the first of three embalming courses required to graduate from the program. This course addresses the definitions of death, the public health considerations, ethical performance, necessary instruments, embalming theory and procedures for typical cases. A grade of "C" or better is required in this course to continue in the Funeral Services Administration program. This course may only be repeated once.

Prerequisites: Enrollment into FSAD program, Blue Card status with the Department of Health - Bureau of Funeral Directing. Co-requisite: FSAD 252 or FSAD 253

FSAD 129 **CLINICAL PRACTICUM**

Fall/Spring, 2 credit hour(s)

Students are required to work in an assigned funeral home for a minimum period of five weeks. During this period, the students are expected to relate the theoretical background they have acquired to the practical functions of a funeral director. The faculty will contact the student and the funeral director periodically during the practicum. This will be by personal visits and/or phone conversations. The students are expected to serve this practicum without pay.

Prerequisites: Successful completion of one semester of embalming or permission of instructor.

Course Descriptions: Funeral Services

FSAD 205 MORTUARY HYGIENE *Fall, 3 credit hour(s)*

This course focuses on the diseases which present serious challenges for embalmers. Awareness and recognition of potential infection based upon observed pathological signs is an important means of reducing the occupational hazards related to mortuary practice. Modes of disease transmission, resistance or susceptibility to infection, and exploitable weaknesses of microbes support the working knowledge of disease protection which the modern embalmer must possess.

FSAD 211 EMBALMING AND ASEPTIC TECHNIQUES *Fall/Spring, 3 credit hour(s)*

This course focuses on unique and special problems encountered by the embalmer in professional practice. Microbes and pathogens require special techniques before, during and after the embalming process, to control the spread of pathogens and protect the embalmer. This course will provide a comprehensive understanding of how to control biohazards in the prep-room and prevent cross-contamination.

Prerequisites: Enrollment into FSAD program; FSAD 121, or permission from Program Director; Blue Card status with the Department of Health - Bureau of Funeral Directing. Co-requisite: Take FSAD 252 or FSAD 253.

FSAD 214 FUNERAL HOME MANAGEMENT I *Spring, 3 credit hour(s)*

Study of management techniques and procedures necessary for successful operation of a small business with the major emphasis on funeral home management.

Three hours lecture per week.

FSAD 225 PROFESSIONAL FUNERAL PRACTICE *Spring, 3 credit hour(s)*

Casket and vault construction and composition are extensively covered. Merchandising methods of funeral service goods such as caskets, vaults, and memorial tributes are explored and practiced.

Professional Ethics with special attention given to the Federal Trade Commission's Funeral Rule, are learned and practiced. Funeral industry software is utilized in this course.

Prerequisites: Intro to Information Technology (CITA 110), and Study of Funerals (FSAD 111).

FSAD 245 ACCOUNTING AND TECHNOLOGY FOR FUNERAL SERVICES *Fall/Spring, 3 credit hour(s)*

This course will discuss the fundamental Principles of Accounting as they apply to the practice of funeral directing. The student will develop an understanding of basic accounting terminology used within the funeral profession. The accounting principles will be applied to funeral industry software, as part of office management and recordkeeping. A working knowledge of maintaining financial and personal information will be developed for recordkeeping and governmental reporting. In addition, the client-centered data entry software will be used as part of the process of maintaining case information.

Prerequisites: FSAD 101, FSAD 111, CITA 110

FSAD 252 EMBALMING LAB I *Fall/Spring, 1 credit hour(s)*

This course offers students a hands-on laboratory experience that reinforces the embalming theory taught in FSAD 121 or FSAD 211: Analytical Embalming. Under the direct supervision of a licensed embalmer, students will embalm a minimum of five human remains, complete detailed embalming reports, adhere to OSHA regulations, and demonstrate fundamental embalming techniques.

Prerequisites: Enrollment into FSAD program; FSAD 121 or FSAD 211 or permission from Program Director; Blue Card status with the Department of Health - Bureau of Funeral Directing. Co-requisites: Must be enrolled (or completed) either FSAD 121 or FSAD 211.

FSAD 253 EMBALMING LAB II *Fall/Spring, 1 credit hour(s)*

This course offers students a hands-on laboratory experience that reinforces the embalming theory taught in FSAD 121 or FSAD 211: Analytical Embalming. Under the direct supervision of a licensed embalmer, students will embalm a minimum of five human remains, complete detailed embalming reports, adhere to OSHA regulations, and demonstrate fundamental embalming techniques.

Prerequisites: Enrollment into FSAD program; FSAD 121 or FSAD 211 or permission from Program Director; Blue Card status with the Department of Health - Bureau of Funeral Directing. Co-requisites: Must be enrolled (or completed) either FSAD 121 or FSAD 211.

FSAD 307 HUMAN RESPONSE TO DEATH *Spring, 4 credit hour(s)*

This course is a survey of the psychological, philosophical, and sociological components of human loss and grief. Students will also learn how to complete required funeral service paperwork, as well as how to conduct removals, first calls, arrangements, and funerals. Students will learn social, cultural, and religious funeral standards and requirements.

Prerequisites: Enrollment into FSAD program, SSCI 315 and FSAD 225, or permission from instructor

FSAD 308 INTRODUCTION TO THE CLINICAL EXPERIENCE *Spring, 1 credit hour(s)*

This course prepares the student for their Clinical Practicum & Internship experiences. The student will create a resume, reference list, and cover letter in preparation for a job interview. The goals and objectives of this course will be discussed and a recording keeping system will be established. Finally, the student will participate in a mock interview.

Prerequisites: Complete a minimum of 60 credit hours towards graduation and FSAD 129, or with permission from the instructor.

FSAD 321 ADVANCED EMBALMING *Fall/Spring, 3 credit hour(s)*

Designed to improve the skills and knowledge base of practicing licensed personnel, this course focuses on the less common techniques applied in unusual situations. Waterless embalming, regional

freezing procedures, alternative machinery, and special purpose chemicals will be explored. Unique embalming situations are addressed such as long-term storage, entombment vs burial, decomposed human remains, stillbirths, religious limitations, anatomical embalming, and fragment treatment in anticipation of delayed final disposition. The perfection of techniques of sterile procedure, eye enucleation, terminal disinfection, and personal protection will also be explored.

Prerequisites: FSAD 115, FSAD 121, FSAD 211, FSAD 129. Must possess a Blue Card obtained from the NYS Department of Health, Bureau of Funeral Directing or comply with specific state regulations governing student embalming experience. The student must have access to a state registered funeral home that engages in embalming.

FSAD 322 FUNERAL HOME MANAGEMENT II *Spring, 3 credit hour(s)*

Students will work together in a group to address practical problems facing funeral managers in contemporary society, such as marketing strategies, pricing methods, creative personnel management, alternative memorial activities, financial assessment techniques, aftercare, expansion of facilities space, and the establishment of a consortia of funeral homes. The student will study a particular aspect of funeral home management as it relates to marketing their services to meet the consumer's current needs.

Prerequisites: FSAD 214 and BSAD 100

FSAD 323 RESTORATIVE ART *Spring, 4 credit hour(s)*

This course utilizes special instruments, materials and techniques for restoring human remains, damaged as a result of disease and/or trauma. Numerous pathological conditions are reviewed and the most appropriate methods to restore a natural appearance are developed. Various trauma conditions are also explored to develop competence in a wide range of potential situations. The student will develop procedural restorative art treatment plans for various cases. This course will also explore the principles of color theory as it applies to the restoration and presentation of human remains.

Prerequisites: FSAD 211 and BIOL 207

FSAD 401 FUNERAL SERVICE LAW *Spring, 3 credit hour(s)*

This course deals with the general business laws and specific laws that affect the funeral profession. The student will be concerned with the laws that pertain to solicitation of clients, rights of possession, cemeteries, interstate agreements, international shipping, funding vehicles, association rights, lobbying, local ordinances, and employer/employee relationships.

Prerequisites: Majors only or permission of instructor.

FSAD 406 BEREAVEMENT COUNSELING *Spring, 3 credit hour(s)*

Building upon the rudimentary counseling skills developed in FSAD 227, this course addresses deeper and more varied emotional problems stemming from loss. Utilization of theories of grief from several authorities and application of a range of counseling techniques to individual situations,

Course Descriptions: Funeral Services, Finance

makes this a useful approach to delivery of human services. Anticipatory grief, hospice care, disenfranchised loss, child death, suicide, homicide, absent grief, and extended grief are major topics.

Application of the skills developed is limited to the funeral home setting. The student will observe and describe the progress of a person who has suffered a recent loss as an original research project.

Prerequisites: Human Response to Death (FSAD 307) or permission of instructor.

FSAD 420 **CURRENT ISSUES IN FUNERAL SERVICE** *Fall, 3 credit hour(s)*

As the field of funeral service continues to change in response to societal demands, this class provides the opportunity to keep abreast of these developments. Topic areas include: public health, government regulation, funeral home management, religious and secular rites and rituals. Major focus is on the effects that changes might have on the grief process, societal readjustment following death, and creative ways for funeral service practitioners to address the future. Historical perspective is utilized as a predictive tool in assessing society's new outlook on loss and recovery. Three major issues, determined by consensus of the class and instructor each semester, will be the primary focus of the course. Three hours lecture per week.

Prerequisites: junior status or current licensure as a funeral director. Writing Intensive.

Prerequisites: Minimum junior level status or permission of instructor. This is a writing intensive course.

FSAD 440 **INTERNSHIP IN FUNERAL SERVICES ADMINISTRATION** *Fall/Spring/Summer, 7 credit hour(s)*

Students will spend at least 40 hours per week for 7 weeks in this experiential course. They will perform the standard duties of funeral director trainees in the areas of funeral directing and embalming.

Additionally they will participate in a project determined during the Introduction to Internship course held in a previous semester. Successful completion of the course is based on assessment of supervising faculty and funeral home preceptor according to the assessment plan detailed in FSAD 308.

Prerequisites: FSAD 308 Intro to Internship and be in the first semester of the student's Senior year. Must possess a Blue Card through the NYS Department of Health, Bureau of Funeral Directing or comply with specific state regulations governing Internship/Practicum experiences. Intern site must be approved and indemnified by SUNY Canton prior to beginning Internship experience.

FSAD 445 **MORTUARY COMPLIANCE** *Spring, 2 credit hour(s)*

This course is taken during the last semester of the Funeral Services Administration Program, and covers compliance with all Health Department regulations and federal and state laws pertaining to funeral directing in a state where the student intends to practice. Regulations and laws pertaining to funeral directing are clarified through extensive specialized testing including the National Board Examination (NBE). Student must score an 85% or better in this course to pass.

Prerequisites: Senior status in FSAD program.

FSMA 210 **INTRODUCTION TO FINANCE** *Fall/Spring, 3 credit hour(s)*

This introductory course covers fundamental elements of business finance. Discussions will include the concepts of financial analysis, time value of money, security evaluations, risk and return, capital budgeting, and other issues in corporate decision making. Three hours lecture per week.

Prerequisites: (CITA 108 or CITA 110) and (GER MATH or ACCT 101), or permission of instructor.

FSMA 220 **INTRODUCTION TO INVESTMENTS** *Spring, 3 credit hour(s)*

This course offers an introduction to investments including investment analysis, portfolio management, and capital markets. The course examines the basic concepts and principles of investing, investment policies, types of securities, factors that influence pricing changes, timing purchases/sales, preparing investment programs to meet objectives, investment risk and return, and portfolio balancing.

Instruction also includes an overview of the securities markets and their behavior, including sources of information about the various instruments traded and procedure of trades.

Prerequisites: ACCT 101, ECON 101, and FSMA 210; or permission of the instructor.

FSMA 301 **PERSONAL FINANCE** *Fall/Spring, 3 credit hour(s)*

This course provides broad coverage of personal financial decisions including basic financial planning, tax issues, managing savings and other liquid accounts, credit management, insurance, managing investments and retirement planning. This course also provides knowledge of financial products, analytical tools, and economic analysis in the context of setting personal financial goals and measuring progress.

Prerequisites: Junior level status in Financial Services or permission of instructor.

FSMA 312 **FINANCIAL MANAGEMENT** *Spring, 3 credit hour(s)*

This course is a continuation of Introduction to Finance (FSMA 210). Topics on portfolio theory, efficient market theories, and Capital Asset Pricing Model will be further elaborated and applied to make capital budgeting, capital structure, and dividend policy decisions within corporations. Special topics on agency conflicts, mergers and acquisitions, and corporate risk management will also be discussed.

Prerequisites: A minimum grade of C in Introduction to Finance (FSMA 210) is required or permission of instructor.

FSMA 315 **GLOBAL INVESTMENT** *Fall, 3 credit hour(s)*

The primary objectives of this course are to provide the students with a fundamental knowledge of domestic/international financial markets, financial securities and how they are valued and traded in order to achieve a desired investment objective, both in the theoretical perspective and in the perspective of the investment managers. Special attention is given to the application of the basic concepts to

the three major capital markets: stock, bond and financial derivatives markets.

Prerequisites: ACCT 101, BSAD 201, and ECON 101, or permission of instructor.

FSMA 320 **INVESTMENT ANALYSIS & PORTFOLIO THEORY** *Fall/Spring, 3 credit hour(s)*

The course provides a foundation for selecting financial assets and form sound investment decisions. Traditional and modern approaches to securities selection, investment analysis and portfolio management are included, with emphasis on investment strategy and investment performance evaluation. The major topics to be covered include portfolio analysis, company/industry analysis, optimal portfolio selection, efficient transactions, performance evaluation and investment ethics. Current topics, such as options, futures, swaps and other financial instruments are also explored.

Prerequisites: Financial calculator, Introduction to Finance (FSMA 210), or permission of the instructor.

FSMA 325 **FINANCIAL COMPLIANCE AND REGULATION** *Fall, 3 credit hour(s)*

The role of regulatory and compliance professionals in the financial service industry is currently undergoing enormous change and development. This course will take an interdisciplinary approach incorporating economics, ethics, finance, law and public policy in surveying the specific goals and objectives of the financial regulatory and compliance function. The course is designed with the practitioner in mind with an emphasis on the anticipation and prevention of regulatory and compliance problems before they occur.

Prerequisites: Introduction to Finance (FSMA 210), Business Law I (BSAD 201), Principles of Macroeconomics (ECON 101), and Principles of Banking (BSAD 120), or permission of the instructor.

FSMA 340 **REAL ESTATE FINANCE AND INVESTMENT** *Fall/Spring, 3 credit hour(s)*

This course provides an overview of the real estate finance and investment processes. Various concepts, principles, analytical methods, and tools used for making the decisions regarding real estate assets will be covered. Direct capitalization models and discounted cash flow models are introduced to determine the financial feasibility and values of proposed real estate projects and existing properties. The investment management considerations will also be discussed.

Prerequisites: Junior level status in Financial Services or permission of the instructor.

FSMA 415 **GLOBAL FINANCE** *Spring, 3 credit hour(s)*

This course will cover issues related to both international financial markets

and the financial operations of a firm within the international environment. Major topics include the international monetary systems, foreign exchange regime, management of foreign exchange exposure, international financial management, taxation of

Course Descriptions: Finance, FYEP, Game Design

international income, and international merger and acquisitions

Prerequisites: Global Investments (FSMA 315) or permission of instructor.

FSMA 420 FINANCIAL DERIVATIVES

Spring, 3 credit hour(s)

This course will examine the dramatic growth of the derivatives markets in the last two decades. This growth, triggered by deregulation, globalization, increased uncertainty and volatility, has empowered enterprises to successfully manage their financial price risk. Topics to be covered include: the use of derivatives for risk protection, cash flow modification, arbitrage, and investment. Three hours lecture per week. Prerequisite: junior level status in Financial Services or permission of instructor.

Prerequisites: junior level status in Financial Services or permission of instructor.

FSMA 422 RISK MANAGEMENT

Fall, 3 credit hour(s)

The goal of this course is to provide students with a good conceptual framework for analyzing risk and making risk management decisions in a corporate setting. It focuses on the ways in which individuals and corporations assess, control, and transfer risk. Issues such as what risk is, how it can be measured and transferred, why individuals and corporations care about risk, and how effective risk management programs can be designed and implemented.

Prerequisites: Financial Derivatives (FSMA 420) or permission of instructor.

FSMA 429 ORIENTATION TO CULMINATING EXPERIENCE

Spring, 1 credit hour(s)

This course is intended as the precursor to the senior culminating experience in the Financial Services bachelor's program.

Seniors will meet with faculty on a weekly basis to discuss resume preparation, job interviewing techniques, identifying and securing internships, and internship requirements. This course is a prerequisite to FSMA 480 Internship in Financial Services.

Prerequisites: Senior level status in Financial Services program.

FSMA 460 SENIOR PROJECT

Fall/Spring, 3-15 credit hour(s)

This course is an alternative to FSMA 480. It is designed for students who are unable to complete a 15-credit internship. Students will complete a senior research project specifically addressing issues under the umbrella of financial services management. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee. This course may be repeated for credit up to a maximum of 15 credit hours.

Prerequisites: Introduction to Culminating Experience (FSMA 429) and senior level status in the Financial Services program or permission of instructor.

FSMA 480 FINANCE INTERNSHIP

Fall/Spring, 6-15 credit hour(s)

Financial service internship is a culminating experience in which the student will be expected to integrate and apply concepts gained in previous course work to actual financial service area. In conjunction with a field supervisor at the host organization, the student performs prescribed work within an administrative setting. The internship is tailored to the individual student's career interests and the needs of the supervisor and supervising organization. Such internship assignments may include, but are not limited to, information gathering, analysis, planning, implementation, evaluation, and other tasks and responsibilities as required by the sponsor. This course can be taken multiple times up to a maximum of 15 credit hours.

Prerequisites: Orientation to Culminating Experience (FSMA 429) and senior level status in the Financial Services program, or permission of instructor.

ECON/FSMA 330 FINANCIAL MARKETS AND INSTITUTIONS

Fall/Spring, 3 credit hour(s)

This course provides an understanding of financial markets and financial institutions that operate within the financial markets. It introduces the financial markets where flow of funds occur through financial markets instruments, such as bonds, money markets, mortgage markets, foreign exchanges, stocks and derivatives (futures, forward, options, and swaps). It focuses on financial institutions, such as the Federal Reserve, commercial banks, thrifts, insurance companies investment banks, finance companies, mutual funds. In addition, it provides a comprehensive introduction to risk management within the framework of financial services industry.

Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103) and a minimum 45 credit hours, or permission of instructor.

FYEP 101 FIRST YEAR EXPERIENCE

Fall/Spring, 1 credit hour(s)

First Year Experience is designed to help facilitate the intellectual and social integration of first-time college students into the academic community at SUNY Canton. The course is designed to engage students in critical thinking about their personal, academic, career, and social development as they make the transition to college life. Some sections are specialized for students' specific major or interests.

GAME 110 FUNDAMENTALS OF GAME DESIGN

Fall, 3 credit hour(s)

This course is a comprehensive examination of design processes and addresses the social implications, interactions and usability of game design. The course focuses on the principles and design decisions game designers make. The course also discusses the societal and cultural impact of gaming. Students learn the processes of game design from concept to completion.

GAME 130 GAME DESIGN AND PROTOTYPING

Spring, 3 credit hour(s)

This is a studio-based course investigating the

tools, materials, and foundational aspects of game design and preparation for production. This course presents the process with industry-standard software used to design, develop and manufacture games.

Prerequisites: GAME 110 Fundamentals of Game Design, CITA 180 Introduction to Programming

GAME 210 OBJECT-ORIENTED DESIGN FOR GAME DEVELOPMENT

Fall, 3 credit hour(s)

This course includes programming assignments and a game design project, which will give students and opportunity to practice different roles inside a game development team, and help them to gain practical knowledge of developing game projects through using object-oriented software design pipelines.

Prerequisites: GAME 130 Game Design and Prototyping

GAME 230 3D CHARACTER MODELING

Spring, 3 credit hour(s)

GAME 230 is a character modeling class for the gaming industry. Presuming no experience with Maya, students will start with the basics of Maya and photoshop and will create a polygonal body parts will start with the basics of Maya and photoshop and will create a polygonal body builder character from reference images. Students will learn about simple Forward Kinematic Rigs and build one for the character. In the second half of the semester, they will design and build their own character.

Prerequisites: GAME 210 Object-Oriented Design for Game Development

GAME 240 3D ENVIRONMENTS FOR GAMES

Spring, 3 credit hour(s)

GAME 240 is an environment modeling class for the gaming industry. Presuming no experience with Maya, Photoshop, or Unreal editor, students will start with the basics of each program and learn how to create environments with modular components that would be ready to be coded. Students will gain proficiency in modeling and UV mapping in Maya, and texturing in photoshop, and how to import meshes into Unreal to create detailed environments. Students will learn how to design different kinds of environments, model meshes and create textures and create materials and basic nodal networks.

GAME 250 GAME MECHANICS AND DYNAMICS

Spring, 3 credit hour(s)

Students learn about the design process and project management including consumer expectations, marketing requirements and budget limitations.

Prerequisites: GAME 210 Object-Oriented Design for Game Development

GAME 350 AESTHETICS AND IMMERSION

Fall, 3 credit hour(s)

This course explores designing visuals, adding sound and creating experiences that are more than just functional. It focuses on artistry and design of the experience of the game. Students examine how and why the user connects to the game and

Course Descriptions: Game Design, Graphic and Multimedia Design

how to create that connection. Students study the aesthetics of games and how to create games that immerse players.

Prerequisites: GAME 230 3D Modeling and Texturing for Games

GAME 360 GAMES JOURNALISM *Fall, 3 credit hour(s)*

This course explores both the history and practical application of games journalism. The focus of the class is to help students understand how and why games journalism serves the people who play, make, market and publish games. Students will be asked to develop an understanding of the industry's history and will have a chance to meet and interview members of the games press. Students will also practice a variety of journalistic tasks, including writing a feature, blogging news and live-streaming gameplay. Although the focus of the class is to introduce students to the perspective of a games journalist, they will also learn how to pitch stories and write self-promotional emails on behalf of their own games.

Prerequisites: GAME 110 Fundamentals of Game Design and 45 credit hours

GAME 361 PROFESSIONAL PRACTICE IN GAME DEVELOPMENT *Fall/Spring, 3 credit hour(s)*

In this course, students will dive deep into the contemporary state of the game industry, examining the complex relationship between developers, publishers and games marketing, look at the industry from the perspective of those who work within it, and examine case-studies of both successful and not-successful indie developers. Students will develop professional pitches and practice delivery in a realistic environment. Likewise, students will structure resumes to a format typical for the games industry, practice mock-interviewing skills and practice negotiation using carefully designed case-studies. Students will also hone their craft of game design with a view to finding the elusive combination of challenge, competition, and interaction that players seek. Students will examine the fundamental elements of game design, then go to work prototyping, playtesting and iterating around their own ideas using exercises that teach essential design skills.

Prerequisites: GAME 210 Object-Oriented Design for Game Development

GAME 370 DIGITAL MEDIA AND INTERACTION *Spring, 3 credit hour(s)*

This course explores how digital media is created and utilized within computer games, virtual reality, and simulations. Students develop a video game, including storyboards, design documents, game development, and a playable demo.

Prerequisites: GAME 350 Aesthetics and Immersion

GAME 390 GAME CAPSTONE I *Fall, 3 credit hour(s)*

This course is an orientation to the capstone experience course in the Game Design and Development program, allowing students to develop skills in group communication and teamwork as they plan a culminating research project.

Prerequisites: GAME 370 Digital Media and

Interaction, senior level students in GAME Design, or permission of instructor.

GAME 450 MOBILE GAME DEVELOPMENT *Fall, 3 credit hour(s)*

This course is an introduction to mobile application frameworks, including user interface, sensors, event-handling, data-management and network communication.

Prerequisites: GAME 370 Digital Media and Interaction

GAME 470 EMERGING GAMING APPLICATIONS *Spring, 3 credit hour(s)*

This course explores features of the future of gaming, such as immersive gaming, virtual reality, computer graphics, real-time visualization, secondary screens for gaming, smart-glasses, cross-play, open-source gaming, game development, augmented reality, as well as mobile gaming and cloud gaming. Through learning the course, the students will have a big picture of the features for the future gaming and the trend of gaming industry development.

Prerequisites: Junior/Senior level in GAME Design Program

GAME 490 GAME CAPSTONE II *Spring, 3 credit hour(s)*

This course is a capstone experience course in the Game Design program, allowing students to develop skills in group communication and teamwork as they plan, design, develop, produce and defend a culminating research paper.

Prerequisites: GAME 390 Orientation to Capstone

GAME/GMMD 333 SOUND DESIGN & COMPOSITION FOR MULTIMEDIA *Fall, 3 credit hour(s)*

This course covers composition and production techniques for creating music and sounds for multimedia applications such as games, videos, films, and more. Emphasis is placed on creating engaging sound environments that create emotion, mood, and/or settings across a variety of potential genres.

Prerequisites: GMMD 112 Introduction to Time Based Media

GEOL 101 PHYSICAL GEOLOGY *Fall/Spring, 3 credit hour(s)*

This course will take a general look at the earth including its composition and structure on a large scale. The processes that cause changes in and on the earth will also be studied. Topics will include the study of minerals and rocks, the origin and types of rocks, the rock cycle and the identification of many of the common rocks and minerals. Other topics include geological time, weathering, erosion, glaciers, running water, volcanoes, earthquakes, plate tectonics and geological work.

GMMD 101 INTRO TO MEDIA STUDIES *Fall/Spring, 3 credit hour(s), GER 7*

This course will introduce students to the process of media analysis. Emphasis will be placed on key terms for adopting a critical eye towards mass

media and the development of media literacy in both traditional (print, radio, film, television) and emerging (digital and web-based) forms.

GMMD 102 INTRODUCTION TO DESIGN *Fall/Spring, 3 credit hour(s), GER 8*

Introduction to Design is a studio-based class investigating the tools, materials, and foundational concepts of design. Introduction to Design will present the methodology and critical awareness for problem solving inherent in all design fields. Through the discussion, examination and execution of a variety of design exercises, students will develop their understanding of visual composition and design theory. While the course exercises focus on 2-D graphic design, this broad introduction to design theory develops the creative problem solving skills integral to all fields of design.

GMMD 112 INTRO TO TIME-BASED MEDIA *Fall/Spring, 3 credit hour(s)*

Intro to Time-Based Media provides a foundation for understanding the use of narrative and movement in design communication. Students create and distribute time-based digital content in multiple media. Students are introduced to the fundamental techniques of animation, film and sound editing, and interactivity.

GMMD 200 DIGITAL PHOTOGRAPHY *Fall, 3 credit hour(s), GER 8*

Hands-on activities and studio/lab will permit each student to investigate the applications of applied digital and hybrid photography. Students will develop competency in digital image capture, processing, and critical evaluation. Through technical studio assignments, critiques, and presentations, students will increase their skills in image printing, manual camera operation and using computer imaging software. Students will also develop critical awareness of composition and the relationship of digital photography to other media. Students who take GMMD 200 will not receive credit for GMMD 201 Landscape Photography.

GMMD 201 LANDSCAPE PHOTOGRAPHY *Fall, 3 credit hour(s)*

Hands-on activities and studio/lab will permit each student to investigate the applications of applied digital and hybrid photography. Students will develop competency in digital image capture, processing, and critical evaluation. Through technical studio assignments, critiques, and presentations, students will increase their skills in image printing, manual camera operation and using computer imaging software. Students will also develop critical awareness of composition and the relationship of digital photography to other media.

GMMD 211 FILM ANALYSIS *Fall/Spring, 3 credit hour(s)*

As an introduction to the art of film, this course will present the concepts of film form, film aesthetics, and film style, while remaining attentive to the various ways in which cinema also involves an interaction with audiences and larger social structures. Throughout the course, we will closely examine the construction of a variety of film forms

Course Descriptions: Graphic and Multimedia Design

and styles-including the classical Hollywood style, new wave cinemas, experimental films, and contemporary independent and global cinemas. We will pay particular attention to the construction of film images, systems of film editing, film sound, and the various ways in which film systems can be organized (narrative, non- narrative, genres, etc.) There is a required weekly film screening.

Prerequisites: ENGL 101

GMMD 240 PROFESSIONAL PRACTICES

Fall/Spring, 3 credit hour(s)

Professional Practice is an experiential survey of various design professionals and their working environments. Students attend several on and off campus activities and professional visits, experiencing first-hand the work flow, professional practices and client interaction of designers in their workplaces. Students complete several assignments based on their research and first-hand experiences with several design careers, including the preliminary work in arranging for their GMMD internship.

Prerequisites: GMMD Major and 45 completed credit hours or permission of the instructor

GMMD 301 3-D DESIGN

Spring, 3 credit hour(s)

3-D design bridges the concepts of design with the basic methodologies and concepts of three dimensional fabrication and composition. The course will challenge students to further develop and employ problem solving methodology to a variety of basic conceptual and practical problems in 3-Dimensional space. The course emphasizes the basic sculptural methodologies, including subtractive and additive processes, assemblage, construction, carving, casting, molding, armature, and kinetics/mechanics. The ability to move between 2-dimensional and 3-dimensional conceptualization/ realization is the primary focus of this class.

Prerequisites: Introduction to Design (GMMD 102)

GMMD 302 PROFESSIONAL PHOTOGRAPHY

Fall/Spring, 3 credit hour(s)

Building upon the introductory skills of GMMD201, this course is designed for students who are interested in the professional applications of photography. Students experience a variety of advanced concepts, techniques, and approaches designed to help them enhance their abilities to create and use the digital photographic image in narrative, creative, documentary, commercial, and editorial form. The classroom lectures will emphasize versatile techniques and creative problem-solving strategies. Through practical assignments, students will develop their skills and awareness in on-location photography, constructing and presenting visual narratives, ethics and issues, the creative license in commercial applications, and the ability to meet the demands of providing photography as a service.

Particular emphasis will be placed on the exploration of advanced techniques, including advanced lighting, advanced post-processing, photography as a design tool, and product photography.

Prerequisites: Digital Photography (GMMD 201) and Introduction to Design (GMMD 102), or permission of instructor.

GMMD 311 VIDEO EFFECTS & POST- PRODUCTION

Spring, 3 credit hour(s)

This course provides a project-based exploration of advanced editing techniques in digital video production. Topics include compositing, light matching, colorization, and motion graphics.

GMMD 313 STUDIES IN GENRE FILM

Fall/Spring, 3 credit hour(s)

This course will provide an opportunity to study one film genre in depth. Emphasis will be on thematic cultural analysis of the genre's role in contemporary society. Different topics will be offered on a cycle, including the following: Documentary Film, Horror in Film, The Film Western, History of the American Comic Film, and Science Fiction in Film. Three hours lecture per week.

Prerequisites: Junior status and at least one literature course. Students may take one genre for Gen ED. credit. Students may take two genres for elective credit.

GMMD 317 CULTURE AND COMMUNICATION

Fall/Spring, 3 credit hour(s)

This course provides students with tools to analyze communication resources. The course emphasizes the use of multimodal communication in contemporary popular culture, and considers resources ranging from photography, film, television, music, fashion and subcultures. Students develop detailed analysis of cultural resources through methods derived from semiotics and communication studies.

Prerequisites: ENGL 101 and GMMD 101 or PSYC 101 or SOCI 101 and at least 30 completed credit hours or permission of the instructor.

GMMD 330 WEB DESIGN & DEVELOPMENT

Fall/Spring, 3 credit hour(s)

In this course students are introduced to basic code, web development strategies, and current industry standards. Students learn how to create and edit HTML and CSS with web authoring tools. Special emphasis is placed on file management and image design. The course culminates in a final project utilizing the design process.

Prerequisites: Introduction to Design (GMMD 102), Introduction to Programming (CITA 180) or equivalent, or permission of the instructor.

GMMD 331 DIGITAL ILLUSTRATION & TYPOGRAPHY

Fall/Spring, 3 credit hour(s)

This course emphasizes the acquisition of software skills in vector based graphics. Students explore digital workflow, visual communication, and the design process in relation to illustration, and logo and graphic identity.

Prerequisites: Introduction to Design (GMMD 102), Digital Photography (GMMD 201), or permission of the instructor.

GMMD 332 3D PRINTING AND DESIGN

Spring, 3 credit hour(s)

This is an immersive course in fused filament fabrication (3d printing) and design. Students will develop their applications of 3-dimensional design through CAD drawing and applications in additive manufacturing. Skills that will be developed include

technical knowledge of FFF machines, experience in fabrication with a variety of materials (ABS, PTEG, PLA, NYLON) and digital mesh optimization/repair. Throughout the course students will develop an analytical approach to iterative design and 3D problem solving, preparing for applications in rapid prototyping, on-demand manufacturing, virtual reality, and product customization.

GMMD 337 DESIGN THINKING

Spring, 3 credit hour(s)

This course develops innovative thinking skills related to "wicked" human-oriented problems. Students examine cases and propose resolutions following the five-stage design thinking process of Empathy, Define, Ideate, Prototype, and Test. Cases involve the development and implementation of new products, processes, and services.

Prerequisites: ENGL 101 and GER 1 Math

GMMD 346 SCREENWRITING & PRE- PRODUCTION

Fall/Spring, 3 credit hour(s)

Students explore and develop the narrative of video projects ranging from videos ranging from 60 seconds or less to feature length movies and even longer, serial storylines. Students will be asked to produce their own narrative(s), read the narratives of other students and provide detailed feedback on the works shared in class. Class will consist of an open forum designed to hone students writing and editing skills by discuss the narratives to be shared that class in-depth. The goal is to expose students to multiple video formats, have them dissect the differences in narrative form ranging from dialogue and story to visual impact and audience, and have them create multiple forms of narrative of their own by the end of the semester that will be ready to go into production.

Prerequisites: ENGL 101

GMMD 351 3D ANIMATION

Spring, 3 credit hour(s)

This course is an overview of the techniques and history of 3D animation, including character design, modeling, storyboarding, rigging and animating a scene. Students engage in hands-on projects involving the development of hand-drawn and computer-generated animation. Emphasis is placed on understanding the place of animation in the context of the film, television, internet, and gaming industries, project management, and the development of a personal animation style.

Prerequisites: Introduction to Design (GMMD 102), Digital Photography (GMMD 201), or permission of the instructor.

GMMD 353 DIGITAL AUDIO RECORDING TECHNOLOGIES

Fall/Spring, 3 credit hour(s)

This course provides an in-depth study of digital audio recording technologies. It covers the principles and practices of digital audio, including recording, editing, mixing and mastering. Students will incorporate live instrumental and/or vocal recordings and MIDI instrumentation with a Digital Audio Workstation. Techniques will include both studio and field capture.

Prerequisites: GMMD 112

Course Descriptions: GMMD, Gender Studies, Health and Fitness Promo.

GMMD 365 **ISSUES IN CONTEMPORARY** **ADVERTISING DESIGN**

Fall/Spring, 3 credit hour(s)

Students are introduced to advertising and explore the development of copy, from the basic elements of advertising to honing a message and developing brand narrative to overarching campaign concept development. Students review successful advertising campaigns to learn to break down messaging to its core elements. Students also create and develop copy for campaigns in multiple media, including print, web, interactive, social media, radio, TV, video, point-of-sale and "guerilla" marketing. Using the Workshop methodology developed at the University of Iowa, students share their work with fellow students for discussion and analysis. As a course capstone, students develop their own advertising campaign and create the corresponding advertising and copy in multiple media forms.

Prerequisites: GMMD 101 and GMMD 240

GMMD 401 **MULTIMEDIA PRODUCT DESIGN**

Fall, 3 credit hour(s)

This course provides an experimental and experiential approach to integrating content with new media techniques and processes. Students use computers as creative tools to explore narrative, immersion, virtuality, visuality, and networked public sphere, with an eye towards integrating theoretical understanding of these concepts with the needs of particular design projects. Students also develop planning and organizing skills for experimental interactivity and imaging projects.

Prerequisites: Visual Programming and Development Tools (CITA 342), and Digital Photography (GMMD 302), and senior standing, or permission of instructor.

GMMD 408 **PORTFOLIO DEVELOPMENT & MEDIA** **STRATEGIES**

Fall/Spring, 3 credit hour(s)

This course explores issues of marketing on social media platforms as well as personal branding and portfolio development. Emphasis is placed on research, production and design of professional portfolios and interpretive materials in multiple contexts, and the maintenance of appropriate online presence. The ethics of digital media production and issues related to copyright and compensation are also addressed.

Prerequisites: Professional Communication (ENGL 301)

GMMD 411 **DIGITAL DOCUMENTARY VIDEO**

Fall/Spring, 3 credit hour(s)

This course explores the practice of documentary filmmaking. Students will discuss basic tools and principles of film narration, montage and the technical and compositional aspects of using archival, found and produced footage. Students explore the creative process of interpreting, representing, and affecting the sociological and environmental relationships of this age by means of the moving image.

Prerequisites: Digital Photography (GMMD 201) and Introduction to Design (GMMD 102), or permission of instructor.

GMMD 420 **ANIMATION TECHNIQUES**

Fall/Spring, 3 credit hour(s)

This course develops an overview of the techniques and history of 2D and 3D animation, including stop-motion and tweened animation. Students engage in hands-on projects involving the development of hand-drawn and computer-generated animation. Emphasis is placed on understanding the place of animation in the context of the film, television, internet, and gaming industries, project management, and the development of a personal animation style.

Prerequisites: Digital Illustration and Typography (GMMD 331), Experimental Digital Video (GMMD 412) or Experimental Digital Photography (GMMD 303) or permission of instructor.

GMMD 421 **SUSTAINABILITY DESIGN**

Fall/Spring, 3 credit hour(s)

Sustainability Design is a cross disciplinary study of the issues and efforts surrounding ecological crisis and the move towards sustainability in contemporary design. In this seminar course, students will investigate sustainability issues through lectures from several disciplinary angles, including the science, legal studies, economics, humanities and engineering. Following study and discourse around the problems and goals of sustainability, students will work with faculty to develop a semester long independent project pursuing some of these goals.

Prerequisites: 70 credit hours or permission of instructor required

GMMD 432 **VIRTUAL WORLDS**

Spring, 3 credit hour(s)

This course examines gaming concepts, non-linear narrative, delivery systems and software for various markets such as the entertainment or educational software industries. Working with 2D and 3D visual concepts, virtual reality, interactivity and sound the student will develop media for the entertainment industry. Environments, characters, gaming strategies, role playing concepts, navigation and feedback will be part of the information presented within the course.

Prerequisites: CITA 342, ENGL 393 or ENGL 394, ENGL 221 or ENGL 315, and senior level status, or permission of instructor.

GMMD 440 **ORIENTATION TO CULMINATING** **EXPERIENCE IN GMMD**

Fall, 1 credit hour(s)

This course is the precursor to the culminating experience in the Graphic and Multimedia Design program. The culminating experience will consist of an internship, a group or individual project or a combination of both. Seniors will meet with faculty on a weekly basis to discuss resume preparation, job interviewing techniques, on-the-job training, identifying and securing internships, internship requirements and performance assessment/evaluation. Students prepare their portfolio for either an internship or group/individual project. Students, who chose the group/individual project for their culminating experience will meet with faculty to develop research proposals.

Prerequisites: Senior level status and successful completion of all previous New Media work, or permission of instructor.

GMMD 443 **ARTS MANAGEMENT INTERNSHIP**

Fall/Spring, 3-4 credit hour(s)

Students focus on the challenges of negotiation, public relations, and management. Students explore a variety of management situations in broadcasting, galleries, museums, and theaters and design agencies. Students apply classroom skills in an organizational environment. Working with a faculty and on-site supervisor, the students perform and reflect on prescribed work. Students complete a supervised internship in an appropriate internship setting commensurate with the student's career interests and at the appropriate baccalaureate level.

Prerequisites: GMMD 440: Orientation to Culminating Experience in GMMD

GMMD 444 **MULTIMEDIA PROJECT DESIGN II**

Spring, 4 credit hour(s)

This course is a capstone experience course in the Graphic and Multimedia Design program, allowing students to develop skills in group communication and teamwork as they plan, design, develop, produce, present, and defend a culminating research project. Through regular research, critiques, and planning sessions with GMMD faculty, the senior student capstone projects are developed and realized. This course builds on the skills, projects and working methodology developed in the GMMD 401; culminating in a public presentation of student works and an exit portfolio for graduation.

Prerequisites: GMMD 401: Multimedia Product Design, or permission of instructor.

GRST 201 **INTRODUCTION TO GENDER STUDIES**

Spring, 3 credit hour(s)

This course provides a broad introduction to the field of Gender Studies. From an interdisciplinary approach, this course explores past and present theories and issues about gender including, but not exclusive to, class, race, social justice, emancipation, economics, and education. Students are introduced to feminist ideology and methodology, as well as the causes and effects of gender inequality. Three hours of lecture per week.

Prerequisites: Composition and the Spoken Word (ENGL 101) or 30 credit hours earned; or permission of the instructor.

HEFI 201 **HEALTH & WELLNESS PROMOTION**

Fall, 3 credit hour(s)

This introductory course in Health and Wellness promotion introduces students to concepts required for development of successful Health/Wellness promotion programs for a variety of patient/client populations. Concepts such as the impact of socioeconomic status on health/wellness, cultural diversity as related to health/wellness, methods of creating change, and teaching strategies and theory, including teaching the adult learner, are covered. Students discuss current literature related to these topics and develop a promotion/wellness intervention project based on an area of their choice.

Prerequisites: Sophomore level status or permission of instructor.

Course Descriptions: Health and Fitness Promotion

HEFI 202 HEALTH AND WELLNESS ACROSS THE LIFESPAN

Spring, 3 credit hour(s)

Students explore the application of health promotion principles for individuals at different stages of life, from birth to old age. Disease and health promotion issues common to each population are identified and discussed. Students formulate strategies to promote healthy lifestyles and advocate for positive changes in health policy for individuals and communities.

Prerequisites: Health and Wellness Promotion (HEFI 201) or permission of instructor.

HEFI 203 MOTOR DEVELOPMENT

Spring, 3 credit hour(s)

This course covers the concepts of motor learning and motor development, how they affect motor learning, and what normal motor skills are for the various age groups. Students explore how our motor responses progress and develop from the very young, to the very old, and how differing motor, cognitive, and social abilities will affect our motor skills. Students learn how an individual learns motor skills, what things affect their ability to learn, and how to structure a motor learning environment to positively influence the physical, instructional, and affective factors in motor learning. Students practice designing and structuring effective practice sessions, and how to demonstrate, verbalize and provide feedback.

Prerequisites: Health and Wellness Promotion (HEFI 201) or permission of instructor. -, Corequisite: Health and Wellness Across the Lifespan (HEFI 202) or permission of instructor.

HEFI 300 BIOMECHANICS

Spring, 3 credit hour(s)

This course provides students the knowledge to analyze and evaluate anatomical and mechanical factors influencing motor skill activities. Musculoskeletal ailments are among the most prevalent disorders in the world, and knowledge and understanding of how to correctly move and exercise is of utmost importance when working with the general population. This course will allow students to acquire a working knowledge of biomechanical principles for use in the field of exercise prescription. This course applies and builds on musculoskeletal anatomy.

Prerequisites: BIOL 217 or permission of instructor

HEFI 303 EXERCISE PHYSIOLOGY

Fall/Spring, 3 credit hour(s)

Students study immediate and long term physiological responses and adaptations to exercise. Specifically, the role of the musculoskeletal, neuromuscular, cardiovascular, and respiratory systems in regulating exercise is covered in detail and adaptations of these systems to exercise are discussed. Environmental and hormonal influences are also included. Students explore specific aspects of training for sports performance.

Prerequisites: Human Anatomy & Physiology I & II (BIOL 217/218) or permission of instructor.

HEFI 310 ADVANCED CARE AND PREVENTION OF ATHLETIC INJURIES

Fall/Spring, 3 credit hour(s)

This course is designed to further reinforce the knowledge and skills necessary for recognition and assessment of sport related injuries. The management and prevention of sport related injuries is discussed, as well as specific taping techniques.

Prerequisites: Introductory Course Prevention and Treatment of Athletic Injuries (HLTH 106) or Human Anatomy & Physiology I & II (BIOL 217/218) and Junior level status, or permission of instructor.

HEFI 320 PSYCHOLOGY OF HEALTH & FITNESS

Fall/Spring, 3 credit hour(s)

This course examines human behavior and how it relates to healthy behavior and fitness. The effects of psychological factors on health, fitness and wellness, and the effects of physical activity and sports on psychological well-being is discussed. The concept of Positive Psychology, a strength-based, preventive approach to personal and community research and interventions is an integral part of the course.

Prerequisites: Human Development (PSYC 225), junior level status, or permission of instructor.

HEFI 375 FITNESS AND SPORTS NUTRITION

Fall/Spring, 3 credit hour(s)

This course provides students with an understanding of the link between nutrition and exercise. Specifically, students examine the unique demands of exercise training for athletes at all levels and the impact of nutrition on performance. Students integrate their knowledge of exercise physiology and sports nutrition to create a dietary plan that enhances athletic performance.

Prerequisites: Exercise Physiology (HEFI 303) or permission of instructor.

HEFI 401 FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION

Fall/Spring, 4 credit hour(s)

Students acquire the knowledge and skills to assess the physical fitness of apparently healthy individuals. Focus of the course is on the four components of physical fitness: cardiorespiratory fitness, muscular fitness, body composition, and flexibility. Hands-on training in assessment and exercise prescription for these four components is included during laboratory sessions.

Prerequisites: Health and Wellness Across the Lifespan (HEFI 202), Exercise Physiology (HEFI 303), or permission of instructor.

HEFI 402 STRENGTH & CONDITIONING

Fall, 3 credit hour(s)

This course serves to provide students with advanced knowledge and skills to design and implement safe and effective strength and conditioning programs specifically for an athletic population. An in-depth study of resistance training is included, along with specialized topics such as bioenergetics, endocrine response to resistance exercise, and use of performance-enhancing substances. Aerobic and anaerobic exercise prescription for the athlete is discussed in detail. This course provides specific preparation for the student who wants to pursue

certification as a Strength and Conditioning Specialist (CSCS) through the NSCA.

Prerequisites: Exercise Physiology (HEFI 303)

HEFI 403 COMMUNITY WELLNESS

Spring, 3 credit hour(s)

This course introduces students to the benefits of establishing health promotion programs in community settings. Students are provided with the knowledge and tools required to assess community needs, plan and implement wellness and fitness programs, and assess program outcomes. Theories of behavioral change guide the assessment and planning process.

Prerequisites: HEFI 201 and HEFI 202

HEFI 404 LEGAL ASPECTS AND DOCUMENTATION IN HEALTH AND FITNESS PROFESSIONS

Fall, 3 credit hour(s)

Students learn and discuss the current standards and guidelines that help health and fitness establishments provide high-quality service and program offerings in a safe environment. Students learn the high standards of care to satisfy fitness facility certification. They also learn standards and guidelines for pre-activity screening, orientation, education, and supervision; risk management and emergency procedures; facility design and construction; facility equipment; operating practices; signage; other client contact fundamental skills; as well as history taking and effective documentation of client information.

Prerequisites: HEFI 201, HEFI 202, HEFI 203

HEFI 405 CURRENT ISSUES IN HEALTH & FITNESS

Spring, 3 credit hour(s)

This writing intensive course focuses on current issues related to health promotion and prevention of disease, with an emphasis on the role of physical activity. Healthy People 2020 provides a framework from which to generate topics and discussion. Students are required to research current events and issues that present themselves on a local, national, and worldwide level and formulate their own thoughts and conclusions regarding these topics.

Prerequisites: Senior level status in HEFI program

HEFI 406 ORIENTATION TO INTERNSHIP

Fall/Spring, 1 credit hour(s)

This course is a pre-requisite course that prepares students for HEFI 407. Best practices in searching for internship opportunities as well as the fundamentals for developing an internship contract that meets SUNY Canton guidelines are discussed. Students are expected to submit an internship proposal which includes anticipated goals and objectives for the internship, as well as a timeline for completion. Students are provided guidance in documenting daily reflections and activities in a journal and for building a professional portfolio.

Prerequisites: Senior level status in HEFI program or permission of instructor.

HEFI 407 HEALTH/FITNESS INTERNSHIP

Fall/Spring, 1 credit hour(s)

This internship course provides the student with

Course Descriptions: Health and Fitness Promtion. History

practical experience in a health/fitness setting. This experience enables students to integrate concepts and skills gained in the classroom/lab setting. The internship is individualized based on the career interests of the student and the specific needs of the organization. Internship proposals must be presented and approved prior to registration for the course.

Prerequisites: HEFI 406 and Senior level status in HEFI program

HEFI 408 EXERCISE PRESCRIPTION FOR SPECIAL POPULATIONS

Spring, 3 credit hour(s)

Students acquire the knowledge and skills to assess the physical fitness of individuals with special needs. Focus of the course is on how to assess the four components of physical fitness: cardiorespiratory fitness, muscular fitness, body composition, and flexibility in patients/clients who have special needs. Hands-on training in assessment and exercise prescription for these four components is included during laboratory sessions. Special needs populations include: pregnancy, heart disease, cancer, diabetes, obesity, poor psychological health, osteoporosis, arthritis, the older adult, children and adolescents, neurological conditions, metabolic disorders, etc.

Prerequisites: HEFI 401 and HEFI 402

HEFI 409 APPLIED EXERCISE PRESCRIPTION

Spring, 3 credit hour(s)

Students directly apply the knowledge and skills learned in HEFI 401: Fitness Assessment and Exercise Prescription to assess the physical fitness of apparently healthy individuals. The focus of the course is on improving the four components of physical fitness (cardiorespiratory fitness, muscular fitness, body composition, and flexibility) of assigned clients, and/or helping clients achieve their objective health and fitness goals. Students are assigned 1-2 apparently healthy clients to prescribe exercise for over the course of the semester.

Prerequisites: HEFI 401; must be of senior status in HEFI program

HEFI 410 APPLIED STRENGTH & CONDITIONING

Spring, 4 credit hour(s)

Students directly apply the knowledge and skills learned in HEFI 402: Strength and Conditioning to design and implement safe and effective strength and conditioning programs specifically for an athletic team. The focus of the course is on designing an off-season foundational program for fall and winter terms, and/or an in-season maintenance program for spring teams.

Programs are geared towards sport specificity in regards to bioenergetics, aerobic needs, and muscular strength/power requirements of the sport. Students are assigned 1-2 athletic teams to design a program for, and will directly work with the athletes and coaching staff of those teams.

Prerequisites: HEFI 402; must be of senior status in HEFI program

HIST 101 HISTORY OF EUROPE TO 1815

Fall/Spring, 3 credit hour(s), GER 10

This is a basic survey course in European history from the Late Middle Ages to 1815. The course focuses on the political institutions, social structures,

economic structures, and cultural developments that shaped European civilization. Among the topics to be studied are: the Late Middle Ages, the Renaissance, the Reformation, contact between Europe and the Americas, absolutism, the Scientific Revolution, the Enlightenment, and the French Revolution.

HIST 102 HISTORY OF EUROPE SINCE 1815

Fall/Spring, 3 credit hour(s), GER 10

A study of European history from 1815 to the present. The focus is on the social, cultural, economic, and political changes which transformed Europe in the Modern period. Among the topics to be studied are: Napoleon, industrialization, urbanization, liberalism, nationalism, mass culture, imperialism, socialism, fascism, World War I, World War II, the Cold War, fall of the Soviet Union, and European integration.

HIST 103 US HISTORY TO 1877

Fall/Spring, 3 credit hour(s), GER 9

In this course students will explore the leading aspects of American history from pre-colonization through Reconstruction. Attention is given to political issues, institutions, political parties, leadership, and diplomatic and constitutional questions, as well as economic, social, and intellectual trends. This course also focuses on what is unique in the American historical experience and relates American history to the broader global setting.

HIST 105 US HISTORY SINCE 1877

Fall/Spring, 3 credit hour(s)

In this course students will explore the leading aspects of American history from the Civil War to the present. Attention is given to political institutions, diplomatic initiatives and constitutional questions, as well as broader economic, social, cultural, religious, and intellectual trends. This course also focuses on what is unique in the American historical experience and relates American history to the global context.

HIST 106 WORLD HISTORY TO 1500

Fall/Spring, 3 credit hour(s), GER 10

This course offers a general survey of world history to 1500. Using a global perspective, this course examines the emergence and development of world civilizations and their cross-cultural interactions. Some of the themes examined include: ancient civilizations and empires of the Near East, ancient China, India, Classical Greece and Rome, the development of world religions, the Arab world, Medieval Europe, and Africa and the Americas prior to European contact.

HIST 107 WORLD HISTORY SINCE 1500

Fall/Spring, 3 credit hour(s), GER 3 & GER 10

This course offers a general survey of modern world history since 1500. Using a global perspective, this course examines the intellectual, economic, political, social, and cultural forces that have linked and shaped the major world societies since 1500.

Topics to be covered include: the development of global trade and new economic models; European expansionism; social and political revolutions in Europe, the Americas, and Asia; the development

of modern political institutions; global conflict; decolonization; and the social and cultural interactions of people across national boundaries.

HIST 303 COLONIAL AMERICAN SOCIETY

Spring, 3 credit hour(s)

In this course students will explore the important themes in the history of the British American colonies in the seventeenth and eighteenth centuries. Particular attention is devoted to social and cultural developments, and to the bringing together of peoples from three different continents in the colonies. Other avenues of inquiry relating to such matters as imperial politics and economic growth will also be pursued.

Prerequisites: HIST 103 and ENGL 101 or permission of instructor.

HIST 304 US WOMENS HISTORY

Fall/Spring, 3 credit hour(s)

This course explores the social, economic, and political themes in United States Women's History from pre-European contact through the twenty-first century. The diversity of women is emphasized and issues of class, race, national origin, activism, work, and the role of motherhood will be explored. Citizenship and the status of women in relationship to government will be discussed and analyzed.

Prerequisites: 30 credit hours, ENGL 101 and a 2.50 cumulative GPA, or permission of instructor.

HIST 305 HISTORY OF THE VIETNAM WAR

Fall, 3 credit hour(s), GER 9

In this course students will examine the 20th century conflict in Vietnam through the lens of American involvement and interaction. Political, military, social, economic and cultural contexts will be explored from both American and Vietnamese perspectives. The impact of the Vietnam War on American society, politics, and its Cold War foreign policy and conduct will be examined as will the impact of the war on Vietnamese society and its subsequent development.

Prerequisites: ENGL 101 and HIST 105, or permission of the instructor.

HIST 306 US IMMIGRATION HISTORY

Fall/Spring, 3 credit hour(s), GER 3 and GER 9

This course examines the history of immigration to the United States through the current time period. The main themes of the course will include issues of race, class, ethnicity and gender and how they factor into the immigration process and subsequent settlement period. A plethora of immigrant groups will be studied not exclusive to the following: Eastern and Southern Europeans, Asian and Pacific Islanders, Latin Americans, and Africans.

Prerequisites: HIST 103 or HIST 105 or permission of Instructor

HIST 307 AMERICAN THOUGHT SINCE 1865

Fall/Spring, 3 credit hour(s)

In this course students will explore American ideas from the end of the Civil War to the present. The topics covered in this course include debates over Darwinism, religious belief, scientific truth and aesthetic judgment, as well as the intellectual underpinnings for the major movements and institutions

Course Descriptions: History, Health-Related

of the post-Civil War era including democracy, feminism, civil rights, anticommunism and capitalism.

Prerequisites: HIST 105 or permission of instructor

HIST 309 **AFRICAN AMERICAN HISTORY** *Fall/Spring, 3 credit hour(s)*

In this course, students will study the unique experience of African Americans and how this experience relates to and interacts with American society as a whole. This course covers the major events in African American history, including the political, economic, social, cultural and intellectual aspects, as well as constitutional questions and the meaning of citizenship.

Prerequisites: HIST 103 or HIST 105 or permission of instructor

HIST 310 **THE EUROPEAN CITY IN THE INDUSTRIAL AGE** *Fall, 3 credit hour(s), GER 10*

This course examines the relationship between industrialization, technology, and the development of the modern city in nineteenth and twentieth-century Europe and the ways in which societies addressed modern urban problems, such as crime and public health, and how cities became centers of mass popular culture and national pride.

Prerequisites: ENGL 101, or permission of the instructor

HIST 315 **CHILDREN, YOUTH, AND REVOLUTION IN TWENTIETH-CENTURY EUROPE** *Fall/Spring, 3 credit hour(s), GER 3 and GER 10*

This course examines the ways in which children and youth experienced the major conflicts, and the political, cultural, and social revolutions of twentieth-century Europe; the place of children and youth within the political ideologies of the century; the development of generational conflict and youth culture; and shifting definitions of children and childhood in the face of conflict and revolutionary change.

Prerequisites: 30 credit hours, ENGL 101, or permission of instructor

HIST 320 **TWENTIETH-CENTURY EUROPE** *Fall/Spring, 3 credit hour(s), GER 10*

This course provides a close examination of the major social, economic, cultural, and political developments in European history from the eve of the First World War through the end of the twentieth century. Emphasis is placed on conflicts such as World War I, the Spanish Civil War, World War II, the Holocaust, the Cold War, and decolonization and the ways in which conflict shaped Europe and the experiences of individuals throughout the twentieth century. While the primary focus is on Western Europe, developments in the Eastern Bloc will also be discussed.

Prerequisites: ENGL 101, or permission of the instructor

HIST 321 **EUROPEAN IMPERIALISM AND DECOLONIZATION** *Fall/Spring, 3 credit hour(s)*

Examines the development of New Imperialism in Europe in the late nineteenth century; European

expansion in Africa, Asia, and the Middle East in the late nineteenth and early twentieth centuries; and the process of decolonization that followed in Africa, Asia, and the Middle East in the twentieth century and their impact on contemporary global developments.

Prerequisites: 45 credit hours or permission of instructor

HIST 325 **HISTORY OF LGBTQ+ AND T/GNC** *Fall/Spring, 3 credit hour(s)*

In this course students will explore the social, economic, and political themes in the history of American LGBTQ+ and T/GNC people from colonialism through the twenty-first century. The diversity of queer people is emphasized and issues of social and economic class, race/ethnicity, national origin, socialization, activism, and work are explored. Citizenship and the status of queer people in relationship to government and organized religion are discussed and analyzed.

Prerequisites: HIST 103 and/or HIST 105 or permission of instructor

HIST 375 **HISTORY OF CHILDHOOD AND YOUTH IN THE UNITED STATES** *Fall/Spring, 3 credit hour(s)*

In this course students will explore the social, economic, and political themes in the history of American childhood and youth from colonialism through the twentieth century. The diversity of children is emphasized and issues of social and economic class, race/ethnicity, national origin, gender and sexuality, activism, and work are explored. Citizenship and the status of children in relationship to government are discussed and analyzed.

Prerequisites: ENGL 101, HIST 103 or HIST 105, or permission of the instructor

HLTH 103 **HEALTH: CURRENT PERSPECTIVES AND PRACTICAL APPLICATIONS** *Fall, 3 credit hour(s)*

This general elective course is designed as an introductory health education course. The course will provide an opportunity for students to explore healthy life styles as well as learn about major health problems in the United States. Members of the teaching team will collaborate to help students become more informed about their rights and responsibilities related to remaining healthy or for accessing health services.

Three hours lecture per week.

HLTH 104 **INTRODUCTION TO GERONTOLOGY** *Fall, 3 credit hour(s), GER 3*

This interdisciplinary course is designed to introduce the student to the field of gerontology (the study of aging). The aging person is viewed in a holistic manner. Topics to be included are demography of aging, social and economic characteristics of aging, biological, psychological and social theories of aging, biomedical aspects of aging and selected issues in health and aging.

HLTH 105 **PATHOLOGY** *Fall, 3 credit hour(s)*

This course considers the natural response of the human body to disease, the process and progress of

disease, and the implications for community health. Particular emphasis is placed on causes of deaths of interest to the embalmer. Three hours lecture per week. Open to all students.

HLTH 110 **SURVEY OF COMPLEMENTARY MEDICINE** *Fall, 3 credit hour(s)*

This is an introductory course, which will survey eight major areas of complementary medicine. The eight major areas include Chinese medicine, Ayurveda, Naturopathic medicine, Homeopathy, Mind/Body medicine, Osteopathic medicine, Chiropractic medicine, and Massage Therapy/Body works. Three hours lecture per week.

HLTH 115 **COMMUNICABLE DISEASES** *Fall/Spring, 3 credit hour(s)*

The course is designed for students interested in health. The major emphasis is reportable communicable diseases. Students learn the how to identify the disease agent, the reservoir, the mode of transmission, and the control of the spread. Diseases will be grouped as gastrointestinal, respiratory, blood-borne, and sexually transmitted.

HLTH 175 **BASIC NUTRITION** *Spring, 3 credit hour(s)*

This basic nutrition course is designed to create an awareness of everyday healthy eating and physical activity necessary for a healthy lifestyle. This course discusses personal profiles, Body Mass Index, calorie needs, dietary guidelines, and chronic disease risk factors.

Prerequisites: ENGL 101

HLTH 200 **MEDICAL TERMINOLOGY OF DISEASE** *Fall/Spring, 3 credit hour(s)*

Medical terminology will be presented from a disease viewpoint. Diseases will include a cross-section of several different areas such as skin, respiratory, blood, and neonatal. Three hours lecture per week.

HLTH 212 **HAPPINESS, HEALTH, & WELLBEING** *Fall/Spring, 3 credit hour(s)*

Our world has become increasingly technological, complex and fast paced. As we work to achieve a life of happiness and contentment, many ignore the quality of our lives and the health of our body and mind. This course is a contemporary exploration of happiness in everyday life and its relationship to the well being and the health of our body and mind.

HLTH 242 **BOTANICAL MEDICINE** *Summer/Winter, 3 credit hour(s)*

This course is an overview of botanical medicine that will cover topics including: the history of botanical medicine, taxonomy and identification of herbs, herb actions, the 35 most common medicinal herbs, traditional/historical uses of each herb, and preparation/storage techniques for herbal medicine types (including infusions, decoctions, tinctures, hydrosols, ointments, salves, lotions, syrups, baths, poultices, and more). Bioactive components, current research trends, and toxicity/proper use will be discussed for several common herbal preparations.

Course Descriptions: Health-Related, Health Care Management

HLTH 303 **OCCUPATIONAL HEALTH AND SAFETY** *Spring, 3 credit hour(s)*

This course explores health and safety issues related to the workplace. Environmental controls that reduce transmission of communicable diseases, exposure to toxic substances, hazardous working conditions, and accidents are included. Public policy decisions and health control program compliance issues are addressed. The effects of human-environmental interactions on physical, mental, and social well-being are explored.

Prerequisites: Junior status or permission of instructor.

HLTH 330 **GRANT WRITING STRATEGIES** *Fall, 2 credit hour(s)*

This course provides a general overview of the grant seeking process. The facilitator will discuss the types of projects that generally get funded, sources that can be used to identify prospective funders, as well as the essential components of a well written grant. Participants will create a needs statement, develop a project that will address that need, write clear goals and objectives for that project, develop a budget and identify an evaluation tool that could be used to measure outcomes for the project.

Prerequisites: Junior level status or permission of instructor.

HSMB 101 **INTRO TO HEALTH SERVICES** **MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course introduces the student to the health care system in the United States and to the role of the health services manager. The course offers an overview of health care system components, management concepts, goal setting, budgeting, organizing, team building and leadership concepts. The importance of communication in health care management area will be stressed. Incorporated into the weekly class sessions, the instructor will have the opportunity to discuss observational experiences to acquaint the student with the management and physical makeup of health care organizations.

HSMB 200 **MEDICAL TERMINOLOGY** *Fall/Spring, 3 credit hour(s)*

This course provides the student with an opportunity to learn the language of medical terminology. Organized by body system, medical terms will be studied within an anatomy & physiology context. Students will learn to use word parts to build terms and decode unfamiliar language. Emphasis is placed on the Medical Record as a legal document including its format, content and the importance of documentation accuracy. Medical Coding will be introduced including classification systems, revenue cycle, and compliance.

HSMB 301 **PUBLIC HEALTH ISSUES** *Fall, 3 credit hour(s)*

The course presents an overview of the history and development of public health. The student is provided with the opportunity to examine the current public health care system and its relevance to their practice. The fundamentals of epidemiology are covered. Applications to the students practice setting are explored. Health planning, health promotion, and global health issues are included.

Prerequisites: HSMB 101 or BIOL 209, or permission of instructor.

HSMB 302 **LEGAL AND ETHICAL ISSUES IN** **HEALTH CARE** *Spring, 3 credit hour(s)*

This writing intensive course prepares the students to examine legal and ethical issues in healthcare as they impact the health services manager and others involved in healthcare decision making. A variety of commonly experienced legal situations and ethical dilemmas will be discussed, including the basics of civil and criminal healthcare law, professional liability, antitrust, managed care, organizational restructuring, patient rights, scientific research, rationing, healthcare practices, and other issues. The course also will educate students in legal research methods applied to the health services management field.

Prerequisites: HSMB 301/NURS 301 Public Health Issues

HSMB 304 **U.S. HEALTH CARE SYSTEM** *Fall, 3 credit hour(s)*

The United States health care system is a large and vital segment of the United States economy. This course identifies and examines the various components of the U.S. healthcare system and the interrelationship of those components. Topics covered include healthcare in a free enterprise system, government regulations, health services access and utilization, health delivery settings, healthcare personnel, the pharmaceutical industry, public health, health insurance, managed care, quality of care, health policy, and other topics.

Prerequisites: HSMB 101 or permission or instructor.

HSMB 305 **MANAGED CARE** *Spring, 3 credit hour(s)*

This course provides the student with the basic information needed to learn critical concepts of managed care. The course will include types of managed care organizations, elements of management control and governance structure, and quality management in managed care. Regulating, legal and ethical issues related to managed care will be discussed.

Prerequisites: U.S. Health Care System (HSMB 304) and junior level status, or permission of instructor.

HSMB 306 **HEALTH CARE FINANCING** *Fall, 3 credit hour(s)*

This course provides the student with an opportunity to understand the fundamentals of the financial management of health care organizations. The course includes such topics as accounting, financial statement analysis, time value money, cost analysis and budgeting, and agency costs and their effects on financial decision making.

Prerequisites: HSMB 304 and FSMA 210 or junior level status or permission of instructor

HSMB 307 **HEALTH CARE FACILITY** **ADMINISTRATION** *Spring, 3 credit hour(s)*

The course explores the overall responsibilities

of an administrator in contemporary health care facilities. These responsibilities involve planning, implementation, and other management skills. To contribute to the achievement of these skills, along with a greater knowledge of health operations, the course examines health care organizational structures, operational aspects of clinical and non-clinical departments, delivery and finance system issues, quality improvement, strategic planning, decision-making, evaluation, and other administrative related topics.

Prerequisites: HSMB 304 or permission of instructor.

HSMB 308 **HSMB INTERNSHIP ORIENTATION** *Fall, 1 credit hour(s)*

An internship is required to complete degree requirements in Health Services Management. The course prepares students for the internship by: securing an appropriate site and establishing learning objectives, describing journal contents and a portfolio, establishing contracts for SUNY approval and appropriate liability insurance documentation.

Prerequisites: Senior level status or permission of instructor

HSMB 309 **NURSING HOME ADMINISTRATION** *Fall, 3 credit hour(s)*

This course is designed to help students apply the knowledge and skills acquired in earlier courses to the specific field of nursing home administration. It covers such topics as operational management, finance, human resources, residential care, and environmental management, dealing with those subjects in the context of nursing home administration.

Prerequisites: HSMB 101

HSMB 310 **HEALTHCARE QUALITY AND PATIENT** **SAFETY** *Fall, 3 credit hour(s)*

This course discusses the state of current healthcare and the role of patient safety as a professional responsibility. Students will achieve a familiarity with the definition and measurement of quality of healthcare in a variety of healthcare setting along with the drivers of quality improvement, the history of healthcare quality, the principles of quality improvement, and the integrated patient safety risk management programs that promote the national patient safety goals.

Prerequisites: HSMB 101 or permission of instructor

HSMB 311 **HEALTH CARE INFORMATION** **TECHNOLOGY** *Fall, 3 credit hour(s)*

The course provides a comprehensive overview of uses and impact of health information systems and technology in healthcare delivery and public health. It explores the ways in which health information technology can assist healthcare managers in setting strategic goals, budgeting, personnel management, and data collection. The course also provides students with the strategic tools for planning, selecting, building, and implementing the health information systems' platforms necessary for the direct patient care and the management of hospital and public health sectors.

Prerequisites: HSMB 304 U.S. Health Care System and HSMB 200 Medical Terminology course, or permission of instructor.

Course Descriptions: Health Care Management, Human Services

HSMB 312 **MEDICAL PRACTICE MANAGEMENT** *Spring, 3 credit hour(s)*

This course identifies and examines the various components of the medical practice management and the interrelationship of those components. It prepares students to examine principles and applications of medical practice management. The course covers the history of medical practice, and defines various models of medical practice and the regulatory issues related to each model. It educates students on medical practice's financial, human resource, emergency, and quality management.

Prerequisites: HSMB 101 - Introduction to Health Services Management and FSMA 210 Intro to Finance, or Permission of Instructor

HSMB 313 **CORPORATE COMPLIANCE IN HEALTHCARE** *Spring, 3 credit hour(s)*

This course provides the student with the information needed to learn critical concepts of corporate compliance in healthcare operations. The course will include leadership responsibility for the assessment, identification and corrective action related to operational fraud, waste and abuse potential. Elements of organizational revenue cycle and operations related to government reimbursement for its beneficiaries, along with the development of an "Effective Corporate Compliance" program, as defined by the NYS Office of Medicaid Inspector General and the federal Office of Inspector General (OIG). Regulatory, legal and ethical issues related to medical-ethical-legal compliance issues will be discussed.

Prerequisites: Junior level status or permission of instructor

HSMB 314 **HEALTH POLICY ANALYSIS** *Fall, credit hour(s)*

This course explores the processes of policy making and law that address many of the key health concerns that face the U.S. Students will learn to think critically about potential causative factors associated with these health issues and the policy alternatives that are needed to address them effectively. The impacts of individual rights, federal and state regulations as well as health economics are considered. Students apply their course learning in the development of a final policy analysis brief that addresses a health policy issue of their choice. Resulting policy analysis competence skills can be applied in any health practice setting.

Prerequisites: HSMB 101 or permission of instructor.

HSMB 315 **MEDICAL CODING** *Fall/Spring, 3 credit hour(s)*

A comprehensive overview of the medical coding profession and the tools a coder uses to report inpatient and outpatient diagnoses and procedure services to health plans. An emphasis is placed on learning coding concepts, guidelines, conventions and selection of compliant ICD-10-CM, ICD-10-PCS, CPT and HCPCS codes based on medical record documentation. Healthcare revenue cycle insurance and reimbursement concepts are also covered.

Prerequisites: HSMB 200 and BIOL 217 or permission of instructor

HSMB 316 **EQUITY, DIVERSITY, AND CULTURAL COMPETENCE IN HEALTHCARE** *Fall/Spring, 3 credit hour(s)*

The course is designed to provide students with an understanding of socioeconomic factors, which are contributing to health disparities, healthcare access, and lack of sufficient diversity in health care. The students will analyze key social justice issues relevant to health disparities and identify the features of civic discourse in a functioning pluralistic democracy, with an eye to cultivating greater health equity.

HSMB 317 **CURRENT CHALLENGES IN HEALTH CARE** *Fall/Spring, 1 credit hour(s)*

The course is designed to provide students with an understanding of the current challenges in health care that impact health care access, cost, quality and patient experiences. The students will analyze factors that are prevalent in managing and reshaping the health care delivery system.

Prerequisites: HSMB 101 or permission of instructor

HSMB 318 **GLOBAL HEALTH** *Spring, 3 credit hour(s)*

The course explores the comprehensive global public health issues and health care systems around the globe. The following global health issues will be explored: population health outcomes, communicable and non-communicable diseases, health and human rights, and socio-economic and environmental determinants of health. The students will explore various national health systems and the way those systems deliver health services.

Prerequisites: Junior level status or permission of instructor.

HSMB 319 **DIRECT SUPPORT PROFESSIONAL, FRONT LINE SUPERVISOR** *Spring, 3 credit hour(s)*

The course is designed to provide students with an understanding of the role and responsibilities of Direct Support Professionals' Front Line Supervisors. The students will analyze the, National Alliance for Direct Support Professionals (NADSP) core competencies, code of ethics, and the National Front Line Supervisors competencies.

HSMB 408 **INTERNSHIP FOR HEALTH CARE MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

Working in conjunction with a Field supervisor, the student performs delegated work within an administrative setting. This is a culminating experience in which the student is expected to integrate concepts gained in previous program course work. The internship will be individualized according to the career interests of the student and the needs of the supervising organization. Internship assignments may include information gathering, analysis, planning, implementation, evaluation, and other responsibilities.

Prerequisites: HSMB 308 and 2.5 GPA. Senior level status.

HSMB 410 **SENIOR SEMINAR** *Fall/Spring, 3 credit hour(s)*

This multidisciplinary capstone course integrates materials from Business and Healthcare Management courses to allow students to gain practical skills and knowledge of the health care system and the role healthcare managers have within the healthcare system. Students analyze and evaluate advanced health care issues, i.e. impact of Affordable Care Act on healthcare facilities, providers, and consumers. Students also study contemporary challenges by incorporating knowledge gained through health care courses and required readings.

Prerequisites: Completion of a minimum of 90 credits in the Bachelor of Healthcare Management degree or permission of instructor.

HUMA 111 **INTRODUCTION TO MORAL PHILOSOPHY** *Fall/Spring, 3 credit hour(s)*

In this course students learn terminology, history, and formal theories of philosophic ethics. The course analyzes multiple perspectives on a global scale. Students engage and critique the works of various practitioners in the discipline. Emphasis is on understanding of theory, appreciation of historical context, and methodology for modern application.

HUMA 189 **ACTING AND IMPROVISATION** *Fall/Spring, 3 credit hour(s)*

This course will examine various strategies for creating and performing characters from written and unwritten texts. Students will practice improvisation and perform various roles for both self and peer evaluation.

Various acting techniques and methods for creating characters will be utilized.

HUSV 100 **HUMAN SERVICES FORUM** *Fall, 1 credit hour(s)*

In this course students will be introduced to the Applied Psychology curriculum as well as aspects of the SUNY Canton First Year Educational Program. The course emphasizes features of Applied Psychology values, philosophy, ethics, and potential careers in the Human Services profession in addition to self-awareness, critical thinking, problem solving, and related skills needed to be successful in academic pursuits. Students may not receive credit for both HUSV 100 and FYEP 101.

HUSV 101 **INTRODUCTION TO CAREER DEVELOPMENT IN HUMAN SERVICES PROFESSIONS** *Fall/Spring, 3 credit hour(s)*

This course will focus on aspects of professional and career development for individuals currently employed in non-degree entry positions seeking higher level positions or individuals interested in gaining knowledge regarding entry level career development in human services settings. Topics include an introduction to personal and professional development, community networking, crisis intervention, documentation skills, and participant supports.

Course Descriptions: Human Services, HVAC

HUSV 201 **INTRODUCTION TO HUMAN SERVICES** *Fall/Spring, 3 credit hour(s)*

An introduction to the field of Human Services work. This course provides a sense of the scope of practice, the various fields of work and the type of clients encountered. Students will receive an overview of models of development and intervention along with an introduction to ethical conduct.

HUSV 281 **FOUNDATIONS OF CHEMICAL DEPENDENCY AND TREATMENT** *Spring, 3 credit hour(s)*

In this course students will focus on an advanced study of the nature of addiction, including an overview of the addictions field, treatment approaches, assessment and diagnostic tools, treatment settings, and health concerns with substance-use disorders. Additional topics explored include pharmacology, toxicology and screening, family issues, and support groups.

Prerequisites: PSYC 101 and HUSV 201 and SSCI 181 or permission of the instructor.

HUSV 305 **PROFESSIONAL AND ETHICAL RESPONSIBILITIES IN HUMAN SERVICE PROFESSIONS** *Spring, 3 credit hour(s)*

In this course students will examine ethical and legal issues confronting professionals in human services careers. The course focuses on processes to address dilemmas and maintaining professional boundaries and wellness. Different profession codes of ethics are compared and contrasted.

Prerequisites: HUSV 201: Introduction to Human Services and/or Permission of Instructor.

HUSV 310 **WORKING IN HUMAN SERVICE AGENCIES** *Fall/Spring, 3 credit hour(s)*

In this course students will be introduced to the basic skills and knowledge required of entry-level personnel in human service agencies. The course examines the conditions creating human needs and how agencies respond to these needs. Emphasis will be on working with others in a human service agency, how these agencies provide services to people in need, and how professionals help clients to function more effectively.

Prerequisites: HUSV 201: Introduction to Human Services and/or Permission of Instructor.

HUSV 315 **MENTAL HEALTH PRACTICE** *Fall, 3 credit hour(s)*

In this course, students will be introduced to mental health care, services, and practice. The course provides an overview of the historical roots of mental health care, the state of modern mental health care, and potential future trends in the field. A thorough examination of therapeutic and clinical skills will be partnered with classroom practice and presentation of these skills. Mental health over the lifecycle will be reviewed. Finally, common mental health disorders will be studied and paired with evidence-based treatment and interventions.

Prerequisites: PSYC 101 and PSYC 275 or permission of the instructor.

HUSV 325 **GROUP THERAPY** *Spring, 3 credit hour(s)*

In this course students will be introduced to the crucial skills that are necessary for competence in the area of understanding systems and conducting groups. Topics to be addressed include working with different types of groups, the counseling process, and responding to cultural differences that may affect group process. Special populations and issues such as children, adolescents, elderly, mental health and addiction, survivors of sexual abuse, and divorced couples are explored.

Prerequisites: HUSV 315 Mental Health Practice or permission of the instructor. - Corequisite: PSYC 410 Counseling Skills

HUSV 350 **CARE COORDINATION, DOCUMENTATION, AND REFERRAL SKILLS** *Fall, 3 credit hour(s)*

This course offers specialized, applied knowledge in the development of skills for the care coordination process, from intake to termination. Actual agency documentation forms give students the opportunity to prepare and manage files using electronic means. Referral skills are also being emphasized.

Prerequisites: SSCI 181 and HUSV 281 or permission of the instructor

HUSV 375 **ASSESSMENT, DIAGNOSING, AND TREATMENT PLANNING** *Spring, 3 credit hour(s)*

In this course, students are instructed in the process and skills needed for assessment, diagnosing, and treatment planning for substance abuse/dependence and co-occurring disorders. The course explores motivational techniques and introduces students to current best practices used in the field of addiction treatment and behavioral health.

Prerequisites: SSCI 181 and HUSV 281 and PSYC 225 and PSYC 275 or permission of the instructor

HUSV 415 **ADDICTION TREATMENT COLLOQUIUM** *Fall, 3 credit hour(s)*

This course introduces students to specialized knowledge of topics in the field of addiction treatment. Students use this information to supplement the treatment process and to broaden their scope of practice.

Prerequisites: SSCI 181 and HUSV 281 or permission of the instructor

HUSV 420 **ORIENTATION TO HUMAN SERVICES** *Fall/Spring, 3 credit hour(s)*

In this course, students will focus on issues related to public policy, professional behavior, interpersonal dynamics, and work-related skills related to human service settings in preparation for HUSV 421: Human Services Practicum. Students will explore and secure practicum placements for HUSV 421 while enrolled in the HUSV 420 Orientation.

Prerequisites: HUSV 201 Intro to Human Services and HUSV 315 Mental Health Practice and/or permission of the faculty practicum coordinator.

HUSV 421 **PRACTICUM IN HUMAN SERVICES I** *Spring, 3 credit hour(s)*

In this course, under direct supervision of direct care staff and supervisors, students will be provided with the opportunity to put the knowledge and skills they have learned in the classroom into practice in a human services organization. Students accepted into this practicum are required to complete 80 hours of field experience (practicum) and attend one 50-minute class per week. Per the laws of the New York State Office of the Professions, students will not be directly involved in decisions regarding client evaluations, diagnosis, and treatment planning.

Prerequisites: Applied Psychology majors only. Senior Status, HUSV 420 Orientation to Practicum in Human Services, minimum overall 2.5 GPA, and permission of the instructor

HVAC 101 **REFRIGERATION I** *Fall, 2 credit hour(s)*

The fundamentals of refrigerating and air conditioning equipment are the emphasis of this course. Students study the basic refrigeration cycle and the function of each component; compressor, condenser, evaporator and metering device.

HVAC 102 **REFRIGERATION LAB I** *Fall, 2 credit hour(s)*

Students apply knowledge of the basic refrigeration cycle and the function of each component; compressor, condenser, evaporator and metering device in laboratory experiments. Use of hand and power tools is stressed in laboratory work. Students cut, bend, solder, braze, flare, and swage copper tubing. Flowing nitrogen is stressed during brazing operations.

HVAC 103 **HYDRONICS** *Fall, 3 credit hour(s)*

The fundamentals of hydronic distribution systems will be covered in this course. Students study basic heat transfer and the use of hydronics in residential and commercial settings.

HVAC 104 **HYDRONICS LAB** *Fall, 2 credit hour(s)*

The fundamental construction methods for hydronic distribution systems will be covered in this course. Students will understand how to install and evaluate hydronic system performance in residential and commercial settings. Safe use of hand and power tools is stressed in laboratory work.

Prerequisites: Corequisite: HVAC 103

HVAC 105 **FORCED AIR SYSTEMS** *Spring, 3 credit hour(s)*

This course covers the procedures and materials required to install residential and light commercial forced air heating systems. Furnace installation, ductwork sizing, and duct fabrication is studied. Material takeoffs are performed utilizing building plans, and from field measurements.

Prerequisites: HVAC 103 and HVAC 104

Course Descriptions: HVAC, CJ/Investigation/Law Enforcement

HVAC 106 FORCED AIR SYSTEMS LAB *Spring, 2 credit hour(s)*

This course covers the procedures and materials required to install residential and light commercial forced air heating equipment. Furnace installation, ductwork sizing, and duct fabrication are applied. Material takeoffs are performed utilizing building plans, and from field measurements. Thermostats and control equipment are also covered.

Prerequisites: Corequisite: HVAC 105

HVAC 107 SUSTAINABLE SYSTEM DESIGN *Spring, 3 credit hour(s)*

Explanation of building science leading to analysis of energy loads and indoor air quality. The building science portion of this course will lead to discovery of how buildings are put together, how insulation works, and ensuring good air quality.

Leading to a heating and cooling load analysis used equipment sizing.

HVAC 110 PLUMBING *Spring, 3 credit hour(s)*

The fundamentals of residential and commercial plumbing are explained in lecture and applied in laboratory projects. Plumbing code is reviewed to ensure compliance and explain how systems operate properly thus ensuring adequate supply of water and removal of waste from buildings.

HVAC 201 HVAC ELECTRICITY, MOTORS, & CONTROLS *Fall, 2 credit hour(s)*

This course introduces students to AC and DC circuits, interpretation of electrical schematics, troubleshooting using test equipment, motors types and uses, installation of electrical equipment in compliance with local, state, and national codes. The sequence of controls in HVAC are explored in details allowing students to correct electrical faults or diagnose hardware problems.

Prerequisites: HVAC 105 Heating Systems II

HVAC 202 HVAC ELECTRICITY, MOTORS, & CONTROLS LAB *Fall, 2 credit hour(s)*

This course develops hands-on skills at troubleshooting electrical faults, motors, and control sequences.

Prerequisites: HVAC 201 HVAC Electricity, Motors, and Controls

HVAC 203 COMMERCIAL REFRIGERATION *Spring, 2 credit hour(s)*

Commercial applications of refrigeration appliances used in retail food, cold storage warehouses, along with commercial buildings used by humans will develop into topics needed to function as a trained technician. Retail food appliances include walking cooler/freezers used by supermarkets, convenience stores, restaurants, and food services kitchens. Cold Storage explores the equipment necessary to store meat, produce, and dairy products while ensuring perishable goods maintain quality. By their very nature, commercial buildings are an increasing application of refrigeration demand to ensure the cooling and human comfort. Exploring

air handlers and heat pumps in the built environment is necessary for the modern technician.

Prerequisites: HVAC 101 and HVAC 102

HVAC 204 COMMERCIAL REFRIGERATION LAB *Fall, 2 credit hour(s)*

The commercial refrigeration laboratory will focus on evaporator defrost cycles in freezer applications. Our student technicians will focus on applying all their course work on controlling and functioning defrost cycles. Student technicians will discover the complexity of the air handler cooling systems along with the electronic controls of heat pumps.

Prerequisites: Pre-Requisites: HVAC 101 and HVAC 102 Co-Requisites: HVAC 203

HVAC 205 HVAC SERVICE, TROUBLESHOOTING & REPAIR *Fall, 3 credit hour(s)*

This course covers the analysis and repair of HVAC systems. Students utilize electrical meters, pressure measuring equipment, and airflow testers to determine the performance of HVAC systems. Identification and repair of defective components is the focus of this course. Analysis of misapplication is also studied.

Prerequisites: CONS 151 Building Trades-Blueprint Reading & Drafting, HVAC 105 Heating Systems II - Corequisite: HVAC 201 HVAC Electrical and Motor Control I

HVAC 208 EPA REFRIGERATION CERTIFICATION *Spring, 1 credit hour(s)*

This course will introduce students to EPA requirements for safe handling of all refrigerants. Students will be able to obtain EPA 608 certification and certification to handle low GWP refrigerants.

INTL 400 STUDY ABROAD

This course is designed to offer a student an opportunity to enroll in the study abroad programs and courses through other SUNY campuses and gain cultural experience. The students take courses overseas and complete all the requirements outlined by the campus administering the study abroad experience. They also have an opportunity to interact with students from other campuses.

Prerequisites: Based on the specific requirements outlined by the administering campus. Most programs require at least sophomore level standing with the GPA of at least 2.5. Freshman must be in good standing and check with the International Programs Office to ensure eligibility.

JUST 101 INTRODUCTION TO CRIMINAL JUSTICE *Fall/Spring, 3 credit hour(s)*

This course is a comprehensive study of the development of criminal justice systems and operations in the United States. This course includes detailed examination, analysis, and evaluations of the major components of the criminal justice system.

JUST 105 CORRECTIONAL PHILOSOPHY *Fall/Spring, 3 credit hour(s)*

This course provides a survey of the philosophy,

theory, and practice involved in the treatment of convicted law violators of all ages within the institutional environment. This course covers an overview of the correctional field; its origins, development, current status, and future prospects. The role of corrections and its importance in the reduction of crime and recidivism are also evaluated.

JUST 112 CRIMINAL LAW & PROCEDURE *Fall/Spring, 3 credit hour(s)*

This course comprises a study of the fundamentals of criminal law and procedure. Topics covered include: specific constitutional amendments; actus reus and mens rea; searches and seizures; the use of search and arrest warrants, self-incrimination; criminal responsibility; constitutional principles that regulate the balance of power between government and the rights of individual citizens; critical stages of criminal proceedings in the United States; and major US Supreme Court precedents concerning substantive and procedural criminal law.

JUST 201 CRITICAL ISSUES IN CRIMINAL JUSTICE *Fall/Spring, 3 credit hour(s)*

This course provides a study of the economic, political, ethical and emotional issues in policing, courts and corrections. Issues covered may include use of force by law enforcement, juvenile justice, drugs, gender-related violence, racial issues, the media, forensics, mental health and disability, immigration, the death penalty, or other current and emerging topics in criminal justice.

JUST 202 INTRODUCTION TO FORENSIC CRIMINOLOGY *Fall, 3 credit hour(s)*

This course introduces students to the various aspects and applications of the field of forensic criminology. Students explore types of criminological research, evidence, and forensic examination, as well as the role of forensic criminology in criminal investigations; prosecutions and the legal process; and corrections/offender supervision. Special attention is paid to evidence-based practice in the criminal justice and legal systems, with a focus on applying evidence to current and emerging justice-system problems or investigative casework.

JUST 203 CRIMINAL INVESTIGATIONS *Fall/Spring, 3 credit hour(s)*

This course is designed to provide the skills and knowledge necessary to conduct a thorough preliminary investigation of crimes. Techniques used to investigate common categories of crimes will be discussed. A major emphasis in this course will be the preparation and execution of investigative plans as they relate to a team approach. Other skills will include interviewing, crime scene processing, and basic forensic examination of evidence.

Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of instructor.

JUST 204 CRIME AND THE MEDIA *Fall/Spring, 3 credit hour(s)*

This course focuses on the social constructions of crime and justice and the ways in which a variety of media inform and mediate interpretations, beliefs, and understanding of crime in the U.S. Special

Course Descriptions: Criminal Justice

attention is paid to news media, social media, television, and film. Areas of the criminal-legal system analyzed include policing, prisons, and lawyers/courts, as well as other special topics or emerging concerns.

JUST 205 CRIMINAL JUSTICE SEMINAR

Fall/Spring, 3 credit hour(s)

This course is designed to offer the student an opportunity to have a practical field experience with a criminal justice agency of his/her choice. The student observes and participates in the daily functioning of an agency, shares information with other students, and provides the participating agency with a valuable commodity - their time as volunteers. This course may take one of two forms, either a practicum or library research, as agreed upon by both the student and the instructor. The library research option allows the student to conduct research on a criminal justice agency to gain a more in-depth understanding of the function of said agency.

Prerequisites: 30 credit hours in the Criminal Justice, Criminal Investigations, or Law Enforcement Leadership program or permission of instructor

JUST 207 POLICE SERVICES

Spring, 3 credit hour(s)

This course provides students with an overview of the services that police agencies provide to the community. Programs, practices and techniques are presented with an emphasis on lawful behavior, efficiency and effectiveness. Topics include, but are not limited to: the importance of effective communication, arrest procedures, patrol strategy, enforcement of vehicle and traffic laws, dealing with violent behavior, terrorism, juvenile crime, disaster preparedness, and ethical behavior.

Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of instructor.

JUST 209 LAW ENFORCEMENT COMMUNICATIONS

Fall/Spring, 3 credit hour(s)

This course prepares students to write clear, accurate and grammatically correct police reports, evidence and laboratory documents, arrest and search warrants, depositions, statements, and other associated law enforcement documents. Methods of communication such as note taking and interviewing mechanics will be addressed. Spelling and court testimony will be addressed.

Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of instructor.

JUST 210 INTRODUCTION TO FORENSIC INVESTIGATION

Fall/Spring, 3 credit hour(s)

This course familiarizes students with various forms of forensic evidence. The laboratory component of the course provides students an opportunity to process and analyze various forms of forensic evidence.

JUST 211 INTRODUCTION TO PROBATION AND PAROLE

Fall, 3 credit hour(s)

This course introduces students to offender

supervision in the community, with specific focus on the institutions of probation and parole. Students explore the history and foundation of probation and parole in America, as well as their role and function within the larger system of corrections and punishment. The practical daily activities of probation and parole officers are examined, including surveillance, report-writing, offender evaluation, pre-sentence investigations, and court testimony.

JUST 230 FUNDAMENTALS OF HOMELAND SECURITY

Fall/Spring, 3 credit hour(s)

This course surveys the policies, practices, concepts and challenges confronting practitioners in Homeland Security with a focus on local entities. It provides an overview of threats to domestic security from terrorism, weapons of mass destruction, and other related risks and vulnerabilities. It examines the strategies and systems involved in protecting against and responding to threats. Discussion includes the managerial, political, legal and organizational issues related to crisis planning and response, the National Incident Management System impact on local practices, risk assessment and mitigation, communications and technology systems, medical and public health emergencies, and infrastructure protection.

JUST 231 INTRODUCTION TO TERRORISM, INTELLIGENCE AND HOMELAND SECURITY

Fall, 3 credit hour(s)

This course surveys the policies, practices, concepts and challenges confronting practitioners in Homeland Security with a focus on local entities. It provides an overview of threats to domestic security from terrorism, weapons of mass destruction, and other related risks and vulnerabilities. It examines the strategies and systems involved in protecting against and responding to threats. Discussion includes the managerial, political, legal and organizational issues related to crisis planning and response, the National Incident Management System impact on local practices, risk assessment and mitigation, communications and technology systems, medical and public health emergencies, and infrastructure protection.

Prerequisites: Homeland Security major (2335), Criminal Investigation major (1359), CJ: Law Enforcement Leadership major (1911), or Criminal Justice major (640) or permission of instructor

JUST 232 INTELLIGENCE ANALYSIS

Spring, 3 credit hour(s)

This course provides an introduction and overview of the concepts and theory of Intelligence, the Intelligence process and cycle, collection disciplines, and the US Intelligence Community (USIC) at large. This course examines the role of Intelligence in the policy process, oversight and accountability, policies, strategies and public laws that govern and regulate the USIC. Students will examine aspects of counter intelligence, counterespionage, and covert actions and their place within the Intelligence Enterprise.

Prerequisites: Homeland Security major (2335), Criminal Investigation major (1359), CJ: Law Enforcement Leadership major (1911), or Criminal Justice major (640) or permission of instructor

JUST 233 CRIME ANALYSIS

Spring, 3 credit hour(s)

This course provides a comprehensive overview of crime analysis through both theory and practical examples. This course explores the basics of crime analysis to sophisticated analytical concepts that provides a foundation for career analysts, homeland security practitioners, and public policy makers.

Prerequisites: Homeland Security major (2335), Criminal Investigation major (1359), CJ: Law Enforcement Leadership major (1911), or Criminal Justice major (640) or permission of instructor

JUST 300 FORENSIC PHOTOGRAPHY

Fall/Spring, 3 credit hour(s)

This course provides an introduction to basic techniques, equipment, material and other aspects of crime scene photographs including theory and practice of photographic image formation and recordings. The course utilizes "hands-on" instruction with an emphasis on crime scene photography, evidence photography, and surveillance photography.

Prerequisites: Forty-five (45) credit hours in the Criminal Investigation, Criminal Justice: Law Enforcement Leadership, or Homeland Security, program, or permission of instructor.

JUST 301 LATENT PRINTS & IMPRESSIONS

Fall/Spring, 3 credit hour(s)

This course is an introduction to the biological development of fingerprints and the identification of the various fingerprint patterns. Course activities include physical and chemical development of fingerprints, crime scene processing techniques, the Henry System of fingerprint classification, and the comparison and identification of suspect fingerprints through manual and automated means.

Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 302 INFORMATION MANAGEMENT IN CRIMINAL JUSTICE

Fall/Spring, 3 credit hour(s)

This course introduces students to the organization, use, and retrieval of information resources in the fields of criminology and criminal justice, and related disciplines. Open-web data sources are compared against peer-reviewed sources for credibility, authority, relevancy, accuracy, and purpose.

Prerequisites: 45 credit hours or permission of instructor; CJ, CI, LEL, HS or FC majors only.

JUST 303 INVESTIGATIVE INTERVIEWS

Fall/Spring, 3 credit hour(s)

This course provides students with proven techniques which apply to conducting accusatory and non-accusatory interviews. Students develop skills related to preparing for an investigative interview with an emphasis on a proactive role. These skills include developing an interview strategy, interpreting physical and verbal cues, conducting a cognitive interview, developing admissions and confessions and recognizing a false confession. Course includes the most recent court rulings related to investigative interviews and admissibility of statements into court.

Prerequisites: Completion of 45 credit hours in a CJ major or permission of instructor.

Course Descriptions: Criminal Justice

JUST 307 PENOLOGY

Fall/Spring, 3 credit hour(s)

This course provides an overview of the study of punishment in contemporary society. Students investigate the underlying sentiments, philosophies, theories, and practices associated with the societies' attempts to repress and control criminal activities. Current controversies are addressed, including the prison environment as criminogenic, recidivism rates, comprehensive prison reform/comparative penology, harm reduction, reentry, solitary confinement, restorative justice/alternatives to incarceration, and the ethics of punishment.

Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 310 CAUSES OF CRIME

Fall/Spring, 3 credit hour(s)

This course introduces various criminological theories to explain the cause of criminal behavior. Specific attention is placed on the primary theorists and the evolution of their corresponding theories and how they relate to current theories associated with biological, psychological, personality, intelligence and gender, and social disorder. Students learn to identify and apply criminological theories to the commission of specific criminal acts. The history of crime and punishment is reviewed, leading to the present day criminal justice system and competing criminological theories.

Prerequisites: Forty-five (45) credit hours or permission of instructor.

JUST 311 ALTERNATIVES TO INCARCERATION

Fall/Spring, 3 credit hour(s)

This course examines the policies, philosophies, functions, and procedures associated with a variety of community-based correctional services or alternatives to incarceration currently operating or emerging in the U.S. justice system. Students examine these correctional alternatives from the perspective of the practitioner who provides or coordinates these services, as well as from the offender and victim perspectives, who are recipients of such services. Implications for public policy, perception, funding, and safety are discussed.

Prerequisites: 45 credit hours of permission of instructor.

JUST 313 JUVENILE JUSTICE

Fall/Spring, 3 credit hour(s)

This course provides an overview of the creation and evolution of juvenile justice in America. It examines the theories of delinquency, juvenile and police encounters, the adjudication process, status and non-delinquent offenders, detention of juveniles, and the rights of students. The evolution of the laws governing each aspect of juvenile justice is summarized.

Prerequisites: 45 credit hours of permission of instructor.

JUST 314 ETHICS IN CRIMINAL JUSTICE

Fall/Spring, 3 credit hour(s)

This course provides the student with theories and practices of ethics and professionalism in criminal justice. Areas of concentration are law enforcement, courts, and corrections. This course requires

the student to exercise critical thinking skills to solve issues that test the morals and ethics of criminal justice professionals on a daily basis. Students may not earn credit for both BSAD319/Professional Ethics and JUST314/Ethics in Criminal Justice. This course is considered writing intensive.

Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 315 CONSTITUTIONAL LAW FOR CRIMINAL JUSTICE PROFESSIONALS

Spring, 3 credit hour(s)

This course is an examination of the U.S. Constitution and how it guides the procedures and practices of the American criminal justice system, with an emphasis on law enforcement issues. Topics include an historical overview of the Constitution, our country's legal system and the role of the U.S. Supreme Court. Topics also focus on maintaining the balance between individual, state and federal rights, due process, searches and seizures, gun control, obtaining information legally, and rights related to the trial process.

Prerequisites: JUST 101 or LEST 101 and 45 credit hours completed, or permission of instructor.

JUST 316 SEX OFFENDERS

Fall/Spring, 3 credit hour(s)

This course explores the implications of sexual deviance and sexual offending on the criminal justice system and its practitioners. Students consider the nature and etiology of sexually deviant behavior, as well as the societal and legal responses to such behaviors. A case-study approach is taken to examine the applied and practical aspects of sex-offender identification in the investigative process. Students assess the impact of current issues and controversies in sex offender legislation, policy and practice for criminal justice agencies and practitioners.

Prerequisites: 45 semester hours or permission of Instructor

JUST 317 POLICE TACTICAL SEMINAR

Spring, 3 credit hour(s)

This course acquaints students with the methods and techniques that are recognized by law enforcement professionals as necessary for success in a law enforcement career. Students learn mental as well as physical techniques that are needed to tactically handle situations. Issues of officer safety are identified and discussed. The focus is on an analytical understanding of the tactical challenges faced by U.S. law enforcement officers.

Prerequisites: Introduction to Criminal Justice (JUST 101) and completion of 60 semester credits or permission of the instructor

JUST 320 MEDICOLEGAL INVESTIGATIONS OF DEATH

Fall/Spring, 3 credit hour(s)

This course provides an in-depth look into the medico-legal aspects of death investigation, including the manners, mechanisms, and causes of death, as well as the post mortem changes. The course also instructs the student on wound interpretation and the method to apply post mortem conditions to criminal investigations to confirm or refute evidence of wrongful deaths.

Prerequisites: 45 credit hours or permission of the instructor.

JUST 321 MANAGING LAW ENFORCEMENT TRAINING

Spring, 3 credit hour(s)

In this course, students examine issues relating to law enforcement training to include pre-service training, basic law enforcement training, field training, in-service training and specialized training. The course presents a detailed template for training management concentrating on the impact training has on the agency. The course familiarizes students with adult learning concepts as well as cognitive, affective and psychomotor skills training. Central to the course is the understanding and appreciation of the variables associated with assessing the training needs and evaluation of training.

Prerequisites: 45 credit hours in Criminal Investigation, Criminal Justice: Law Enforcement Leadership or Homeland Security or permission of the instructor.

JUST 322 GENDER AND THE JUSTICE SYSTEM

Fall/Spring, 3 credit hour(s)

This course examines the role of gender in a variety of criminal justice contexts, from offending, to policing, to the courts, and corrections. Specific attention is paid to connections between masculinity and violence, how gender shapes patterns of offending as well as victimization, and the extent to which gender offending, violence and victimization are cultural products.

Prerequisites: 45 credit hours, or permission of instructor.

JUST 323 DIVERSITY IN CRIMINAL JUSTICE

Fall/Spring, 3 credit hour(s)

This course provides an examination of the intersections between diverse groups and the variable agencies, practices, policies, and individual actors in the criminal justice system with whom they come into contact. Students examine contacts that criminal justice practitioners have with citizens, victims, suspects, and coworkers, and conceptualize diversity through such intersections. Specific attention is paid to gender, sexuality, race, class, status, culture, age, disability, religion, and politics.

Prerequisites: 45 credit hours or permission of the instructor.

JUST 324 SERIAL MURDERERS AND THEIR VICTIMS

Fall/Spring, 3 credit hour(s)

This course covers topics relating to serial murder and the various categories associated with the designation, including healthcare killers, sexual predators, male versus female murderers, team killers, and their respective victims. The student analyzes the issue of serial murder from a global perspective and ways law enforcement officials are attempting to profile and apprehend suspects.

Prerequisites: 45 credit hours or permission of the instructor.

JUST 326 THREATS TO HOMELAND SECURITY

Fall/Spring, 3 credit hour(s)

In this course students study the post cold war threats to the United States of America and the corresponding security policies. This course takes an "all-hazard" approach to homeland security and

Course Descriptions: Criminal Justice

the current threats facing our nation. Topics addressed include natural hazards, man-made hazards, domestic and international terrorism, weapons of mass destruction, cyber terrorism and the emergency management planning model. This course explains the roles of various first responder agencies and the responsibility of the government to coordinate their response.

Prerequisites: Junior level status in the Criminal Investigation or Criminal Justice: Law Enforcement Leadership program or permission of instructor.

JUST 327 INTERNATIONAL CRIME AND JUSTICE *Spring, 3 credit hour(s)*

This course is an examination of international crime, punishments and international justice perspectives. It includes an analysis of international research efforts and resources developed to address specific transnational criminal activity and crimes against humanity. The role of international courts in delivering justice is also examined.

Prerequisites: JUST 101

JUST 330 QUESTIONED DOCUMENTS *Fall/Spring, 3 credit hour(s)*

This course includes an examination of techniques used to determine the authenticity of documents through the analysis of handwriting, ink and paper sources, methods of mechanical printing, and recover erasures, obliterations and alterations.

Prerequisites: Junior level status in the Criminal Investigation program or Criminal Justice: Law Enforcement Leadership program, or permission of instructor.

JUST 331 PROFILING AND BEHAVIORAL CRIMINOLOGY *Spring, 3 credit hour(s)*

This course provides an introduction to contemporary criminal investigative analysis with a special focus on behavioral criminology. Students explore the nature, history and methods of criminal profiling, as well as its investigative relevance to law enforcement. Case studies are analyzed to apply the principles and methods of profiling to personality and behavioral data about offenders.

Prerequisites: 45 semester hours or permission of Instructor

JUST 333 MANAGING PATROL FUNCTIONS *Fall/Spring, 3 credit hour(s)*

This course provides a study of many aspects of police patrol, including goals and objectives of patrol, staffing and deployment, management styles of supervisors, and supervisory functions including scheduling and budgeting. Through group discussions, role playing activities and situational scenarios, students learn styles and various elements of the patrol function.

Prerequisites: 45 credit hours in Criminal Investigation, Criminal Justice: Law Enforcement Leadership or Homeland Security or permission of the instructor.

JUST 334 COMMUNITY ORIENTED POLICING *Fall, 3 credit hour(s)*

This course provides students with insight into the meaning of community policing and presents

many dimensions necessary to consider when developing and designing a community policing strategy. Students understand the practical side of community policing, recognize the community considerations that need to exist and develop methods applicable to their unique environments. Students discuss community policing as it relates to problem solving, community engagement and organizational transformation. Students also discuss strategies associated in developing positive working relationships with local community leaders and establishing meaningful communications where there is a partnership and commonality of interests.

Prerequisites: None - Corequisite: Introduction to Criminal Justice (JUST 101) and junior level status or instructor's approval.

JUST 335 CRIMINAL JUSTICE AGENCY MANAGEMENT *Fall, 3 credit hour(s)*

Description, analysis, solution, and synthesis of contemporary management problems in a criminal justice organization; presentation and exemplary implementation of management concepts significant to criminal justice organizations; review of case studies for management problem recognition; the study of operational systems; analysis of the role of supervisors and managers.

Prerequisites: Junior level status in the Criminal Investigation or Criminal Justice: Law Enforcement Leadership program, or permission of instructor.

JUST 339 TRUE CRIME INVESTIGATION *Fall/Spring, 3 credit hour(s)*

This course provides an in-depth examination of a real-world crime and its treatment throughout the stages of the justice process. Students examine the case from a variety of perspectives, analyzing the facts and behaviors of the key actors responsible for the commission or disposition of the crime. Special attention is given to the victim and perpetrator's characteristics and behaviors, the crime scene, investigative procedures, the courtroom process and the eventual case outcome.

Prerequisites: 45 credit hours, or permission of the instructor

JUST 340 LEGAL ISSUES OF THE PENAL SYSTEMS *Fall/Spring, 3 credit hour(s)*

Students examine problems and issues faced by incarcerated persons within the American penal system. Course topics include: history of confinement as punishment, issues of visitation, religion, legal assistance, prison discipline, rehabilitation, and the civil and criminal liabilities of corrections officials.

Prerequisites: Introduction to Criminal Justice (JUST 101) and Correctional Philosophy (JUST 105) or permission of instructor.

JUST 341 CORRECTIONS MANAGEMENT AND ADMINISTRATION *Fall/Spring, 3 credit hour(s)*

This course examines the concepts, practices and theoretical bases of the management and administration of correctional facilities. Students will examine the issues of facility management, inmate management, leadership and governance of correctional facilities, personnel management and policy formation, and the challenges facing the future of

American correctional systems.

Prerequisites: 45 credit hours or permission of instructor

JUST 344 CIVIL LIABILITY FOR CRIMINAL JUSTICE ADMINISTRATORS *Fall/Spring, 3 credit hour(s)*

In this course students examine civil liability issues at the local, state, and federal law levels. Students develop better awareness of the liability risks relative to criminal justice service by learning proactive protocols that may minimize personal and organizational liability risks.

Prerequisites: Introduction to Criminal Justice (JUST 101) or Permission of the instructor.

JUST 345 COMPARATIVE JUSTICE SYSTEMS *Fall/Spring, 3 credit hour(s)*

This course is an examination of crime as a world problem and the response of nations to this problem. It includes an analysis of substantive and procedural law in different legal traditions and the multi-national efforts developed to address specific trans-border criminal activity. Similarities and dissimilarities between urban and rural criminal justice are examined in the context of cultural and social structures.

Prerequisites: 45 credit hours in Criminal Investigation, Criminal Justice: Law Enforcement Leadership or Homeland Security or permission of the instructor.

JUST 346 FORENSIC VICTIMOLOGY *Fall/Spring, 3 credit hour(s)*

This course examines the field of forensic victimology as a subfield within forensic criminology. Students explore the scientific study of victims for the purpose of addressing forensic and investigative issues. The course is applied in nature, and specific attention is given to the situational, psychological, and lifestyle aspects of victimology in pursuit of the construction of a victim profile.

Prerequisites: 45 credit hours or permission of instructor

JUST 347 RESEARCH METHODS IN CRIMINOLOGY AND CJ *Fall/Spring, 3 credit hour(s)*

This course introduces students to the practices of consuming and producing research of publishable quality in the disciplines of criminal justice and criminology. Students explore the elements of the research process and the scientific method, paying special attention to ethical considerations in conducting research. Analyzing the processes and principles of the quantitative, qualitative, and mixed-methods approaches to research, students critically evaluate published literature in the field, analyze and interpret data and findings, and consider the usefulness of criminal justice/criminological research to the conceptual understanding of, and field based practice within, the disciplines.

Prerequisites: 45 credit hours or permission of instructor; CI, LEL, HS, FC, CA, CYBR, EADM majors only

Course Descriptions: Criminal Justice

JUST 349 VULNERABLE POPULATIONS IN CRIMINAL JUSTICE

Fall/Spring, 3 credit hour(s)

This course examines a variety of vulnerable populations whose particular characteristics make them especially susceptible to justice- system involvement, and the substantial and enduring harms resulting therefrom. Special attention is paid to the mentally ill, substance-use disordered, and veterans, as well as those whose age, race, gender, ethnicity, or socioeconomic status increase their vulnerability. Current and emerging justice-system policies and practices are evaluated.

JUST 350 VICTIMIZATION

Fall/Spring, 3 credit hour(s)

This course includes a study of the various issues involved in victimization, including theories, intimate versus stranger violence, family victimization, child abuse and neglect, workplace violence, school violence, elder abuse, and the criminal justice response to victimization.

Prerequisites: 45 credit hours or permission of the instructor.

JUST 351 ORGANIZED CRIME

Fall/Spring, 3 credit hour(s)

This course provides students with a viable definition of organized crime, its historical overview from the 18th century to present, and the theories behind why people become involved in crime. Topics include the development of organized crime in the northeast and its westward migration; nontraditional organized crime, the business enterprises of organized crime; the effect of organized crime in labor and business, the affects of the media and international organized crime.

Prerequisites: 45 Credit Hours or permission of instructor.

JUST 353 CRIMINAL JUSTICE TECHNOLOGY

Fall/Spring, 3 credit hour(s)

This course provides students with a survey of criminal justice technologies and their uses within the criminal justice system. In addition to providing significant technical information about technology (such as computer operations, wireless communications and geographic information systems), this course emphasizes the challenges involved in the use of technology such as implementation and interoperability. Moreover, through this course, the study of technology is integrated into wider criminal justice themes including: ethical and legal implications of technology; technology's place in the community based policing model; and, how technology impacts traditional criminal justice policy- making.

Prerequisites: Completion of 45 credit hours in a CJ major or permission of instructor.

JUST 355 PUBLIC SAFETY CRITICAL INCIDENT RESPONSE

Fall/Spring, 3 credit hour(s)

In this course students study the many facets of critical incident response. The course addresses specific obstacles public safety professionals face while responding to a critical incident or a disaster. The material contrasts the characteristics of a routine response to that of a large scale critical incident and

requires the students to consider challenges that may not be common to a typical response situation. From the initial response to recovery, students examine the actions a responder may take and the likely consequences of those actions. Students in this class also study the National Interagency Incident Management System and how it is applied in a critical incident.

Prerequisites: Junior level status in Criminal Justice: Law Enforcement Leadership and/or Criminal Investigations, or permission of the instructor.

JUST 370 FORENSIC TAPHONOMY

Spring, 3 credit hour(s)

This course is an introduction to forensic taphonomy, including an overview of forensic anthropology and archaeology. The course provides a history of forensic anthropology, archaeology, and taphonomy, as well as current challenges and future directions. Specific topics to be covered include the depositional environment, postmortem modifications affecting human remains, and estimating the postmortem interval.

Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 375 GLOBAL TERRORISM: 20TH CENTURY TO PRESENT

Fall/Spring, 3 credit hour(s)

The historical roots of modern terrorism, how the goals, justifications, and methods of terrorist acts in the successive eras are similar, and the strategies to bring terrorist and their organizations into the political process.

Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 380 CIVIL LIBERTIES AND HOMELAND SECURITY

Fall/Spring, 3 credit hour(s)

This course examines the Constitutional and legal framework of the Homeland Security enterprise, discusses specific Constitutional issues and court opinions as they apply to Homeland Security, and considers the relationship between Homeland Security policies and the preservation of civil liberties. The course looks at the balance of the goals, objectives and activities of effective Homeland Security against the compelling need to preserve and extend fundamental American civil liberties. It examines the USA PATRIOT Act and its effectiveness in preventing and responding to the threat of terrorism as well as their role in shaping the development of Homeland Security agencies, policies, strategies, and infrastructure.

Prerequisites: Introduction to Criminal Justice (JUST 101) & completion of 45 credits hours in a CJ major or permission of instructor.

JUST 402 GIS: CRIME MAPPING

Fall/Spring, 3 credit hour(s)

This course provides an introduction to geographic information systems and their use in public safety and crime mapping. This course introduces students in how to use maps to analyze crime, how to analyze spatial data, and how maps can help researchers evaluate programs and policies. Additionally, students are introduced to various software applications that are standard in the industry.

Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 404 CRITICAL CRIMINOLOGY

Fall/Spring, 3 credit hour(s)

This course introduces students to the theoretical foundations of contemporary critical criminology, focusing on some of the major sub-theories and theorists to come out of this growing field of criminological study. Students explore critical race theory, feminist theories, green criminology, convict criminology, abolitionist criminology, realism/ ultra- realism, rural criminology, and postmodern criminology. Select topics in critical criminology, advanced through review of disciplinary studies as well as current events, include police and prison abolition, state violence, antifeminism, media and crime, current issues in immigration, and the militarization of law enforcement.

Prerequisites: 45 credit hours or permission of instructor

JUST 406 CRIME SCENE INVESTIGATION

Fall, 3 credit hour(s)

This course emphasizes crime scene processing and investigation including crime scene search principles, photography, descriptive writing, recognition of physical evidence, methods for collection and preservation of evidence, sketching techniques and methods of transportation or submission of evidence for laboratory analysis.

Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303), or permission of instructor.

JUST 408 INVESTIGATION OF DEATH

Fall, 4 credit hour(s)

This course is a comprehensive study of death investigations including the first responding officer's duties, the investigation at the scene, detectives' duties, case management, manners and modes of death, and identifying suspects. The Course also presents recent statistics and trends related to murder. NOTE" as this course includes a death investigation that typically extends over a four/five day period, students must have the ability to attend extended hours during the life of the investigation. This will include both daytime hours and late evening hours on each day of the investigation.

Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303) and a Criminal Investigation major or permission of instructor. - Corequisites: Crime Scene Investigations (JUST406)

JUST 410 CLANDESTINE GRAVES

Fall/Spring, 3 credit hour(s)

This course presents students with the theories and practices of locating clandestine graves. Lectures address grave assessments, the use of experts, evidence recognition and preservation, and case studies. Labs include grave location, excavation, and recovery techniques.

Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303), or permission of instructor.

Course Descriptions: Criminal Justice

JUST 411 FORENSIC DRUG ANALYSIS AND INVESTIGATION

Fall, 3 credit hour(s)

This course explores the tools and methods used in, and the issues involved with, drug investigations and forensic analyses. Topics include physiological impacts of various illicit drugs, legal categories of various substances, legal issues relating to drug crimes, methods of investigation, field examination, and lab analyses.

Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 412 FIREARM AND TOOLMARK

Fall, 3 credit hour(s)

This course is an in-depth look at the forensic analysis of Firearms Identification. Areas of concentration include the history and development of firearms and ammunition components, serial number restorations, toolmark examinations and distance determinations. Other areas discussed include evidence packaging, reporting results and utilizing the national ballistic database (NIBIN).

Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 413 METHODS OF HUMAN SKELETAL IDENTIFICATION

Spring, 3 credit hour(s)

This course provides an overview of human skeletal identification methods, such as biological profile, radiographic comparison, craniofacial superimposition, stable isotopes, and DNA. The applicability of these methods in forensic, human rights, and mass disaster contexts is explored.

Prerequisites: Completion of 45 credit hours or permission of instructor.

JUST 415 EMERGING ISSUES IN HOMELAND SECURITY

Fall/Spring, 3 credit hour(s)

This course explores the evolving nature of the Homeland Security industry. It examines a number of contemporary issues and their immediate and long-term impact on Homeland Security policies and practices. The roles of the media, law, the Constitution, governmental and corporate entities, and politics at the federal, state and local levels in determining and shaping Homeland Security policy and practice are considered.

Prerequisites: JUST 101 Introduction to Criminal Justice

JUST 420 CORPORATE ROLE IN HOMELAND SECURITY

Fall/Spring, 3 credit hour(s)

This course explores the role of private sector entities in Homeland Security and relationships with governmental Homeland Security agencies. It examines the specific roles, responsibilities, and vulnerabilities of corporate entities in protecting the infrastructure as well as in preventing, deterring, and responding to events.

Institutions such as utility providers, the private security industry, mental health systems, hospitals and biomedical facilities, companies, airlines and airports, the financial services industry, and information technology and telecommunications companies are considered.

Prerequisites: Fundamentals of Homeland Security (JUST 230) and completion of 45 credit hours in a CJ major, or permission of instructor.

JUST 421 CYBER CRIMINOLOGY

Spring, 3 credit hour(s)

This course examines cybercrimes using theories of criminology and assesses from the perspective of the perpetrator and victim. The issue of jurisdiction, policy and legal aspects of the crime are examined since cybercrimes can be committed anywhere on the globe.

Prerequisites: 45 credit hours or permission of instructor

JUST 422 VIOLENT CRIME ANALYSIS

Spring, 3 credit hour(s)

This course discusses the features and characteristics of criminal classification definitions, including homicide, arson, sexual assault, and computer crimes. The students will analyze data used within the criminal justice field to understand the types of crimes and the practical application of the research to assist in an investigation.

Prerequisites: 45 completed credit hours or permission of instructor

JUST 423 INTELLIGENCE-LED POLICING

Spring, 3 credit hour(s)

This course introduces students to the concepts of intelligence-led policing, and what distinguishes it from other policing models. This course provides a focus for increased emphasis on analysis and intelligence as a driver for objective decision making, prioritizing crime hot spots, repeat victims, recidivists, and criminal groups. Key aspects of instruction include crime and harm reduction, disruption and prevention through management, deployment, and enforcement.

Prerequisites: Completion of 45 credit hours, or permission of the instructor

JUST 424 COLD CASE INVESTIGATIONS

Spring, 3 credit hour(s)

This course discusses the techniques used to analyze and investigate a cold case. This course highlights the evaluation of the cold case file through the use of available resources, including electronic databases, interview techniques, autopsy findings, media inquiries, and forensic science disciplines.

Prerequisites: 45 completed credit hours or permission of instructor

JUST 425 INTELLIGENCE RESEARCH AND ANALYSIS

Fall, 3 credit hour(s)

This course examines the concepts and practices involved in the process of research and analysis of intelligence for law enforcement and national security matters. It examines the intelligence research and analysis methods used by intelligence analysts in the U.S. Intelligence Community and Crime Analysts in State and Local Fusion Centers. Students in this course will develop an understanding of intelligence tradecraft and the analytic and research skills used in intelligence work, as well as an appreciation for the ethical, Constitutional, and civil liberties issues involved. Specific topics will include analytic

tradecraft in conducting analysis and the use of structured analytic techniques.

Prerequisites: Completion of 45 semester credit hours or permission of instructor.

JUST 426 ETHICS IN FORENSIC SCIENCE AND ADMINISTRATION OF JUSTICE

Spring, 3 credit hour(s)

This course discusses the demand and quality of forensic services, ethics within the context of forensic science, contextual bias in casework, and the future of the field. The students will examine case studies in order to understand the utility of forensic services and ethical dilemmas from several different perspectives within the field.

Prerequisites: 45 completed credit hours or permission of instructor

JUST 429 INTRODUCTION TO CULMINATING EXPERIENCE SEMINAR

Fall/Spring, 1 credit hour(s)

This course is the precursor to the senior culminating experience for seniors in either the Criminal Investigation or Criminal Justice: Law Enforcement Leadership Bachelor's program. Students meet on a weekly basis with faculty to discuss resume preparation, job interviewing, locating and establishing internships, and internship requirements.

Prerequisites: Senior level status in either the Criminal Investigations or Criminal Justice: Law Enforcement Leadership program or permission of instructor.

JUST 430 CULMINATING EXPERIENCE IN CRIMINAL JUSTICE

Fall/Spring, 3-15 credit hour(s)

This internship is an academic program which integrates classroom work and practical experience with cooperating law enforcement or law enforcement related agencies. It is a structured field experience in which an intern acquires and applies knowledge and skills while working in a responsible role. Working with a supervisor, the student will perform prescribed work within an administrative or operational setting. The internship will be tailored to the individual student's career interests and the needs of the supervising organization.

Prerequisites: All required Criminal Investigation or Criminal Justice: Law Enforcement Leadership curriculum courses or the permission of the department chair.

JUST 431 CULMINATING EXPERIENCE IN CORRECTIONS

Fall/Spring, 3-15 credit hour(s)

This internship is an academic program which integrates classroom work and practical experience during a correctional academy. It is a structured field experience in which an intern acquires and applies knowledge and skills while working in a responsible role during a corrections academy. Working with a supervisor, the student will adhere to the guidelines of the pre-certification training within the academy and perform the necessary tasks for graduation. This course designed for the NYS DCJS approved county corrections academy and can only be used for the SUNY Canton Corrections Academy pre-certification.

Prerequisites: Students must be eligible for and accepted into the SUNY Canton Corrections Academy

Course Descriptions: Criminal Justice, Legal Studies

JUST 432 SENIOR SEMINAR *Spring, 3 credit hour(s)*

This capstone course integrates students' foundational coursework in criminology with an applied focus toward meaningful, evidence-based practice or system change. Students select an area of the justice system in need of a new policy, model of practice or significant reform, and develop a comprehensive change-management plan for this real-world problem.

Prerequisites: 90 credit hours, JUST 302 and JUST 347

JUST 441 DOMESTIC EXTREMISM AND HATE CRIMES *Spring, 3 credit hour(s)*

This course examines the foundations of domestic extremism and hate crimes and how they are manifested in criminal behavior. Various groups who have been labeled as supporting or engaging in domestic terrorism and hate crimes are examined. Focus is placed on the organizational structure, philosophies, and networks of domestic extremists and hate crime groups; federal and state statutory laws impacting domestic extremism and hate crimes; and the interrelations and interactions of domestic extremist organizations and hate crime groups.

Prerequisites: Introduction to Criminal Justice (JUST 101) and completion of 45 semester credit hours or permission of the instructor.

JUST 449 CURRENT ISSUES IN LAW ENFORCEMENT *Fall, 3 credit hour(s)*

This course identifies current and emerging issues that may have an impact on a police manager. Students will integrate concepts related to selection, recruitment and training of officers; various policing philosophies; police management and operations; police misconduct and accountability and use of technology. The historical context of each issue will be considered so students develop a true understanding of each issue. Current U.S. Supreme Court decision and opinions, as well as federal and state mandates affecting agency policies and procedures, will be considered and discussed.

Prerequisites: Introduction to Criminal Justice (JUST 101) and junior level status or permission of instructor.

JUST 450 FORENSIC EVIDENCE ON TRIAL *Spring, credit hour(s)*

This course provides students with an understanding of the legal mechanisms through which forensic evidence moves from crime scene to trial. Students will learn the preparation for, and the presentation at trial that comes along with forensic evidence. Students will learn to create demonstrative evidence to accompany forensic evidence. Students will prepare themselves for the legal argument against the introduction of expert witness testimony. Students will work to develop confidence in their ability to present evidence at trial.

Prerequisites: ENGL101 and Junior status

JUST 485 FRAUD EXAMINATION AND INVESTIGATIONS *Fall, 3 credit hour(s)*

This course covers the theories, principles and methodology of fraud examination and investigation. Students learn how and why fraud is committed, how fraudulent conduct is committed, how fraudulent conduct can be deterred, and how allegations of fraud are investigated and resolved.

Prerequisites: JUST 101, ACCT 101 and 45 credit hours or permission of instructor

LEST 101 AMERICAN LEGAL SYSTEM *Fall/Spring, 3 credit hour(s)*

A general overview of the American legal system, including federal and state court structures, the roles and responsibilities of various participants in the legal process, and the progress of civil and criminal cases through the courts.

LEST 221 CRIMINAL PRACTICE *Fall, 3 credit hour(s)*

This course introduces students to the many aspects of Criminal Law and Criminal Procedure. Students learn the main structure of the criminal justice system, penal statutes, case law, and criminal procedure with a focus on the 4th, 5th, and 6th Amendments to the United States Constitution. There will be a particular focus on Criminal Practice in the State of New York.

Prerequisites: The American Legal System (LEST 101) and Business Law I (BSAD 201) or permission of the instructor.

LEST 310 LEGAL RESEARCH *Spring, 3 credit hour(s)*

An overview of the sources of law in the American system and specific instruction in finding and analyzing the sources needed to answer legal questions, including case law, statutes, administrative law, and secondary sources.

Prerequisites: Successful completion of Expository Writing (ENGL 101) or Oral & Written Expression (ENGL 102), or permission of instructor.

LEST 320 NEGLIGENCE AND INTENTIONAL TORTS *Fall/Spring, 3 credit hour(s)*

Students explore the Law of Negligence and Intentional Torts and how these areas of law affect the business community. Intentional torts include Business Torts, Defamation, Nuisance, Warranty, Strict Liability, Products Liability and an employer's liability for the negligence and torts of agents and employees.

Prerequisites: Business Law I (BSAD 201), or permission of instructor.

LEST 330 LEGAL WRITING *Spring, 3 credit hour(s)*

Instruction in writing documents commonly used in a legal setting, and in analyzing and citing the sources needed to answer legal questions, including case law, statutes, administrative law, and secondary SOURCES.

Prerequisites: Business Communications (BSAD 200), Legal Research (LEST 310), or permission of instructor. This is a writing intensive course.

LEST 340 CONSTITUTIONAL LAW *Fall, 3 credit hour(s)*

This course focuses on the issues raised by the structural parts of the United States Constitution. Consideration will be given to judicial processes in constitutional cases; judicial review; and the federal courts functioning in the constitutional system. Attention will be given to the relationships of the three federal branches of government, with emphasis on some of the powers and limitations of the executive, legislative and judicial bodies that arise from principles of separation of powers and national checks and balances.

Prerequisites: The American Legal System (LEST 101) or Introduction to Criminal Justice (JUST 101) or Business Law I (BSAD 201) and junior status or permission of the instructor.

LEST 350 CIVIL LITIGATION *Fall/Spring, 3 credit hour(s)*

Introduces students to substantive and procedural requirements for, and philosophical underpinnings of, civil litigation in state and federal courts, at both the trial and appellate levels.

Prerequisites: The American Legal System (LEST 101) and Business Law II (BSAD 202), or permission of instructor.

LEST 360 FAMILY LAW *Fall/Spring, 3 credit hour(s)*

Students will explore the core procedural and substantive concepts of family law, including legal aspects of adult family relationships and the law relating to the lives of children. Students will learn how family law principles are applied in a legal practice setting.

Prerequisites: The American Legal System (LEST 101), Business Law II (BSAD 202), or permission of instructor.

LEST 370 REAL PROPERTY *Fall/Spring, 3 credit hour(s)*

Students will examine the law of real property as it relates to real estate transactions, landlord-tenant relationships, and real property disputes. Students will learn how real estate transactions are completed in a legal practice setting.

Prerequisites: The American Legal System (LEST 101), Business Law II (BSAD 202), or permission of instructor.

LEST 375 IMMIGRATION LAW & BORDER CONTROL *Fall/Spring, 3 credit hour(s)*

Students will understand the historical immigration policies and controls as they evolved in the 19th and 20th centuries and then changed after the World Trade Center bombings. The policy changes and their effects will be analyzed to allow students to project the effects of future world events and policy changes. The enforcement methods and means will be studied as will the regulatory and statutory requirements for temporary visits and immigration with an emphasis on practical application of common processes.

Prerequisites: Junior Level Status or permission of the instructor.

Course Descriptions: Legal Studies, Licensed Practical Nursing

LEST 380 **WILLS, TRUSTS AND ESTATES** *Fall/Spring, 3 credit hour(s)*

Students explore the planning and preparation of asset transfers pre-mortem and post-mortem as well as lifetime planning tools commonly associated with trusts and estates. Students learn how attorneys assist their clients to achieve their property transfer and lifetime personal planning goals through preparing wills, trusts and related documents and examine the tax considerations involved in the planning process. Students study the probate process in depth with an emphasis on the client interview process and preparation of legal documents.

Prerequisites: Legal Research (LEST 310) or junior status and approval of the instructor.

LEST 388 **ENVIRONMENTAL LAW** *Spring, 3 credit hour(s)*

This course introduces students to the many aspects of Environmental Law. Students learn the main structure of the American Legal System: sources of law, classification of law, constitutional principles, and administrative agencies that are involved in environmental issues and concerns. The litigation process for environmental disputes is examined. The evolution of environmental policy is examined and primary national policies are introduced. Environmental Laws that relate to air-quality control, water quality control, toxic substance control, waste management and hazardous releases, energy, and natural resources are examined. International environmental laws, particularly those of Canada, are discussed.

Prerequisites: Junior level status

LEST 410 **AMERICAN INDIAN LAW & FEDERAL INDIAN POLICY** *Spring, 3 credit hour(s)*

This course provides an introduction to American Indian Law & Federal Indian Policies. Students examine Indian sovereignty, jurisdiction, and federal/state government to Indian relations. Students analyze events that have shaped American Indian rights under the United States Constitution and the history of those legal developments. The course covers a detailed assessment of the 1924 Citizenship Act as well as the 1968 Indian Bill of Rights Act and impact that each has had on Indian peoples in the United States.

Prerequisites: Business Law II (BSAD 202) or Introduction to Criminal Justice (JUST 101) and junior status or approval of the instructor.

LEST 420 **CANNABIS LAW** *Spring, 3 credit hour(s)*

The regulation of cannabis is undergoing rapid changes in the United States and around the world. In this course, students learn the history and evolution of cannabis legislation, including decriminalization, legalization of medical marijuana, legalization of recreational marijuana, and the conflict between state laws and federal laws.

Prerequisites: LEST 101, BSAD 201, or permission of instructor

LEST 429 **ORIENTATION TO CULMINATING EXPERIENCE** *Fall/Spring, 1 credit hour(s)*

This course is intended as the precursor to the Senior Culminating Experience or the Senior Project in the Legal Studies (LEST) program. Seniors will meet with faculty on a weekly basis to discuss resume preparation, job interviewing techniques, on-the-job training, identifying and securing internships, internship requirements, performance assessment/evaluation as well as the expectations and requirements for the Senior Project. This course is a prerequisite to LEST 480– Internship in Legal Studies and

LEST 485 **SENIOR PROJECT** Prerequisites: Senior status in the Legal Studies program.

LEST 449 **ADVANCED LEGAL WRITING** *Spring, 3 credit hour(s)*

Builds on skills acquired in Legal Writing to prepare students for writing more complex types of legal documents; students will analyze, cite, and find the sources needed to answer legal questions, including case law, statutes, administrative law, and secondary sources.

Prerequisites: Legal Writing (LEST 330) or permission of instructor.

LEST 450 **TRIAL COURT AND RULES OF EVIDENCE** *Spring, 3 credit hour(s)*

This course provides students with a basic understanding of the legal mechanisms through which society resolves its disputes. Students will learn the details of trial and appellate process and procedures. Students will be provided with the necessary tools to develop confidence, ability and control when presenting courtroom testimony.

Prerequisites: The American Legal System (LEST 101) or Introduction to Criminal Justice (JUST 101) and junior level status, or permission of instructor.

LEST 480 **LEGAL STUDIES INTERNSHIP** *Fall/Spring, 3 credit hour(s)*

The Legal Studies Internship integrates classroom work and practical experience with cooperating businesses or agencies. The Internship allows seniors the opportunity to apply classroom learning in a legal or law enforcement setting. It is a structured field experience in which an Intern, under the guidance of a supervisor, acquires and applies knowledge and skills while working in a responsible role. The Internship will be tailored to the individual student's career interests and the needs of the supervising organization. Internship assignments and activities may include, but not be limited to, information gathering, research, drafting of documents, office management, and other tasks and responsibilities deemed necessary. This course can be taken multiple times up to a maximum of 15 credit hours.

Prerequisites: Senior status in the Legal Studies Program. All required courses must be completed before participating in the Internship. Students need permission of Program Director or Dean.

LEST 485 **LEGAL STUDIES SENIOR PROJECT** *Fall/Spring, 3-15 credit hour(s)*

This course is an alternative to the Legal Studies Internship. It is designed for students who are unable to complete a 15- credit internship. Students will complete a senior research project specifically addressing issues under the umbrella of legal studies. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee.

Prerequisites: Internship Orientation (LEST 429) and senior status In the Legal Studies program, or permission of the program director.

LPNC 100 **DRUG DOSAGE CALCULATIONS AND PHARMACOLOGY** *Fall, 3 credit hour(s)*

This course introduces the principles related to pharmacology. It examines a variety of drug classifications and their effects on the body. The course places emphasis on use of the nursing process in drug administration and includes drug calculations.

Prerequisites: Practical Nursing majors only. BIOL 217, ENGL 101, and LPNC 101

LPNC 101 **PRACTICAL NURSING FUNDAMENTALS** *Fall, 8 credit hour(s)*

This course examines the evolution of nursing including current trends, and introduces the health care delivery system to the student. Communication techniques, including documentation, are explored. Legal and ethical considerations and the role of the LPN within healthcare are examined. Students will be encouraged to utilize the nursing process and critical thinking in providing nursing care to clients who are at various points on the health illness continuum. In lab, students will develop skills fundamental to the practice of nursing. Lab and theoretical content will be applied in the long-term care and clinic settings. Three hours lecture, three hours laboratory, a twelve-hour clinical component required weekly.

Prerequisites: Practical Nursing Certificate Majors only. BIOL 217, ENGL 101, LPNC 100.

LPNC 102 **PRACTICAL NURSING - SPECIALTY POPULATIONS** *Spring, 3 credit hour(s)*

This course introduces students to data gathering and nursing care concepts focusing on maternity, newborn, pediatric, and mentally-ill clients. The nursing process and clinical reasoning skills are utilized to adapt nursing concepts and procedures to these special populations.

Prerequisites: Practical Nursing majors only. LPNC 100, LPNC 101, ENGL 101, BIOL 217 - Corequisites: LPNC 103, BIOL 218, PSYC 101

LPNC 103 **PRACTICAL NURSING: MEDICAL-SURGICAL NURSING** *Spring, 8 credit hour(s)*

Students utilize clinical reasoning and the nursing process in learning about fundamental disease processes and the LPN's role in prevention of illness, treatment of disease, and the restoration of health in the adult client. Concepts related to safety, emotional support, communication, client teaching,

Course Descriptions: Mathematics

and pharmacology are integrated throughout the course. Students utilize the nursing laboratory to enhance their psychomotor and clinical reasoning skills in practicing advanced nursing skills. Clinical experiences provide opportunities for students to apply theory/lab in the medical- surgical units and specialty units of acute care hospitals and clinics. Clinical component is required.

Prerequisites: LPNC 100 , LPNC 101, BIOL 217, ENGL 101 - Corequisites: LPNC 102, BIOL 218, PSYC 101

MATH 099 FUNDAMENTALS OF APPLIED MATHEMATICS

Fall, 3 credit hour(s)

This course connects mathematical concepts and procedures to real-life applications relevant to a variety of technical trade fields. Topics include: a review of fundamental arithmetic concepts, order of operations, measurement and conversions, ratio and proportion, signed numbers, exponents and radicals, estimation, and an introduction to algebra. For students with no algebra background or for those receiving less than 75 on the New York State Math A or Integrated Algebra Regents or equivalent examination, or permission of instructor. Three hours lecture per week.

MATH 100 BEGINNING ALGEBRA

Fall/Spring, 3 credit hour(s)

This course is designed to prepare the student for Intermediate Algebra (MATH 106). It assumes a limited algebra background at the secondary level. Topics include: a review of arithmetic operations, signed numbers, exponents, basic geometry concepts (such as angle measure, area and volume formulas), operations with polynomials, solving linear equations, and elementary word problems. Three hours lecture per week.

MATH 101 APPLIED COLLEGE MATHEMATICS

Fall, 4 credit hour(s)

This course is designed to prepare students for success in technical and pre-engineering technology programs. It assumes an algebraic background at an introductory level. The course connects mathematical concepts and procedures to real-life applications relevant to a variety of technical trade fields. Topics include: an introduction to algebra, practical plane geometry, solid figures, angle measurement in degrees and radians, trigonometric ratios, solving systems of equations graphically and algebraically, and solving quadratic equations. Applications using algebra concepts are stressed in this course.

MATH 106 INTERMEDIATE ALGEBRA

Fall/Spring, 3 credit hour(s)

This course reviews and builds on the basic, fundamental concepts of algebra, which are required in many other courses and areas of study. Topics include: a review of fundamental concepts, first degree equations and inequalities, graphing and systems of equations, rational expressions, factoring, exponents and radicals, quadratic equations. Three hours lecture per week. AAS CREDIT ONLY. Prerequisite: Beginning Algebra (MATH 100) with a grade of C or better recommended or high school equivalent, or permission of instructor.

Prerequisites: Beginning Algebra (MATH 100)

with a grade of C or better, or New York State Math A or Integrated Math Regents or equivalent examination with a grade of 70 or above, or permission of instructor.

MATH 111 SURVEY OF MATHEMATICS

Fall/Spring, 3 credit hour(s)

A study of various mathematical topics including an introduction to quantitative reasoning skills, truth table logic, sets, probability, and geometry. This course is designed for non-technical oriented students. It is appropriate for students in liberal arts.

Prerequisites: Intermediate Algebra (MATH 106) with a grade of C or better, or 2 NYS high school regents math courses with a grade of 75 or above on the second New York State Regents mathematics examination, or permission of instructor.

MATH 115 MATHEMATICS FOR ELEMENTARY TEACHERS I

Fall/Spring, 3 credit hour(s)

The study of the development, meaning, and representations of numeration systems, operations on whole numbers, number theory and the real number system. The focus of the course will be on mathematical representations for K-8 topics via problem solving. Three hours lecture per week. The majority of the course will be activity-based (exploration of topics through problem solving activities.) Prerequisite: Intermediate Algebra (MATH 106) or Math A plus one additional year of high school mathematics, or permission of instructor.

Prerequisites: Intermediate Algebra (MATH 106) with a grade of C or better, or two (2) high school regents math courses with a grade of 75 or above on the second New York State Regents mathematics examinations, or permission of instructor.

MATH 116 MATHEMATICS FORELEMENTARY TEACHERS II

Fall/Spring, 3 credit hour(s)

The study of the development, meaning, and representations of statistics, patterns and functions, concepts of geometry, and measurement of two- and three- dimensional figures. The focus of the course will be on the construction of mathematical representations for K-8 topics via problem solving. Three hours lecture per week. Prerequisite: Mathematics for Elementary Teachers I (Math 115) or permission of instructor.

Prerequisites: Mathematics for Elementary Teachers I (Math 115) with a grade of C or better, or permission of instructor.

MATH 121 COLLEGE ALGEBRA

Fall/Spring, 4 credit hour(s)

This course provides basic algebraic concepts and an introduction to trigonometric and logarithmic functions. Emphasis is placed on equations and inequalities; polynomials, rational, exponential and logarithmic functions; and graphing and data analysis including modeling and linear regression. Additional topics include complex numbers; radical functions; right triangle trigonometry; systems of equations; and elementary transcendental functions.

Prerequisites: Intermediate Algebra (MATH 106) with a grade of C or better, or two (2) high school regents math courses with a grade of 75 or above on the second New York State Regents math-

ematics examinations, or permission of instructor. Cannot be taken for credit by students with credit in Pre-Calculus Algebra (MATH 123).

MATH 123 PRE-CALCULUS

Fall/Spring, 4 credit hour(s)

This course provides an intense study of topics which are fundamental to the study of Calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Additional topics include complex numbers; systems of equations and inequalities; trigonometric identities; and trigonometric applications.

Prerequisites: Intermediate Algebra (MATH 106) with a grade of C or better, or 3 NYS high school regents math courses with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor. Cannot be taken for credit by students with credit in College Algebra (MATH 121)

MATH 131 COLLEGE TRIGONOMETRY

Spring, 3 credit hour(s)

This course is designed for those students who lack the trigonometry skills needed to perform successfully in Calculus I. Topics include: angle measurement; right triangle trigonometry; trigonometric identities; trigonometric equations; graphs of trigonometric functions; inverse trigonometric functions; oblique triangles; and exponential and logarithmic functions.

Prerequisites: College Algebra (MATH121) with a grade of C or better, or 3 years of high school mathematics with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

MATH 141 STATISTICS

Fall/Spring, 3 credit hour(s)

This course is an introduction to the standard methods of descriptive statistics, probability, and inferential statistics. Topics include: organization and presentation of data, descriptive measures of data, linear correlation and regression analysis, probability, binomial and normal probability distributions, t-distributions, estimation of parameters, and hypothesis testing. The Chi-square distribution and Chi-square applications are covered if time permits.

Prerequisites: College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123), Survey of Mathematics (MATH 111), or Mathematics for Elementary Teachers II (MATH 116) with a grade of C or better, or 3 years of high school mathematics with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

MATH 151 BUSINESS CALCULUS

Fall/Spring, 4 credit hour(s)

This course is an intuitive introduction to the Calculus. Topics include: Review of functions, analytical geometry of the line, properties of limits; the derivative with applications; transcendental functions; and integrals with applications. Selected additional topics will be offered, as time permits, at the discretion of the instructor.

Prerequisites: College Algebra (MATH 121) or

Course Descriptions: Mathematics, Mechanical

Pre-Calculus Algebra (MATH 123) with a grade of C or better, or for students who have taken 3 NYS high school regents math courses with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

MATH 161 CALCULUS I *Fall, 4 credit hour(s)*

This course is the first of a three-semester sequence of Calculus courses. Topics include: A quick-review of functions and graphs; limit and continuity; the derivative and its properties; differentiation of algebraic and trigonometric functions; curve sketching; related rates; applied extrema problems; other applications of differentiation; numerical methods; antidifferentiation.

Prerequisites: College Algebra (MATH 121), Pre-Calculus Algebra (MATH 123) or College Trigonometry (MATH 131) with a grade of C or better, or for students who have taken 3 NYS high school regents math courses with a grade of 75 or above on the third New York State Regents mathematics examination, or permission of instructor.

MATH 162 CALCULUS II *Spring, 4 credit hour(s)*

This course is the second of a three-semester sequence in Calculus. Topics include: differentials, definite integrals and their applications; integration of exponential, logarithmic, trigonometric and inverse trigonometric functions; techniques of integration; series; parametric equations and polar coordinates.

Prerequisites: Calculus I (MATH 161) with a grade of C or better recommended or permission of instructor.

MATH 263 CALCULUS III *Fall, 4 credit hour(s)*

This course is the third of a three-semester sequence of Calculus courses developed for students in Engineering Science who expect to transfer to an engineering program at a four-year institution upon graduation. Other qualified students may also take this course. Topics include conic sections, parametric and polar relationships, vector valued functions and basic differential geometry of plane and space curves, multivariable functions, partial derivatives and their applications, multiple integration and vector analysis (optional). Four hours lecture per week. Prerequisite: Calculus II (MATH 162) with a grade of C or better recommended or permission of instructor.

Prerequisites: Calculus II (MATH 162) with a grade of C or better or permission of instructor.

MATH 341 STATISTICS II *Spring/Fall, 3 credit hour(s)*

This course includes confidence intervals and hypothesis testing for population proportions, variance and standard deviation; hypothesis testing two samples for differences between means; correlation and regression, including multiple regression; finding prediction intervals and hypothesis tests for the linear correlation coefficient; Chi-square tests and the F- distribution; non-parametric tests. Three lecture hours per week. Pre-requisites: Statistics (MATH 141) or permission of instructor.

Prerequisites: MATH 141 with a grade of C or better, or permission of instructor

MATH 351 DISCRETE MATHEMATICS *Fall/Spring, 3 credit hour(s)*

This course studies the basic tools and techniques of discrete mathematics and their applications. The topics include sets, logic, proofs, functions and relations, algorithms, elementary number theory, counting methods, discrete probability, pigeonhole principle, recurrence relations, introduction to graph theory and Boolean algebras. Three hours of lecture per week.

Prerequisites: College Algebra (MATH 121) or Pre-Calculus Algebra (MATH 123) with a grade of C or better, or permission of instructor.

MATH 361 LINEAR ALGEBRA *Fall/Spring, 3 credit hour(s)*

This course is an introduction to the theory of finite dimensional abstract vector spaces and linear transformations. Topics include: systems of linear equations, matrices, matrix algebra, determinants and inverses, linear combinations and linear independence, abstract vector spaces, change of basis and coordinates, inner product spaces, orthonormal bases. We also consider linear transformations, isomorphisms, matrix representation of linear maps, eigenvalues and eigenvectors, diagonalization and similarity. The applications include computer graphics, Markov chains, chemistry, linear regression, network flow, electrical circuits, and differential equations. Three lecture hours per week. Pre-requisites: Calculus II (MATH 162) or permission of the instructor.

Prerequisites: MATH 162 or permission of the instructor.

MATH 362 DATA ANALYSIS *Spring, 4 credit hour(s)*

This course is an introduction to data analysis. Software will be used to analyze and interpret data throughout the course. Included topics are multiple regression, data modeling, along with an introduction to different distributions such as Gamma and Beta distributions.

Prerequisites: MATH 141, MATH 361

MATH 364 DIFFERENTIAL EQUATIONS *Fall/Spring, 3 credit hour(s)*

A course in Ordinary Differential Equations. Topics include: First-order differential equations, higher-order differential equations with constant and variable coefficients, applications of first and second-order linear equations, Laplace transforms, systems of linear differential equations and numerical methods for ordinary differential equations (optional).

Prerequisites: MATH 162 with a grade of C or better or permission of instructor.

MATH 371 GRAPH THEORY *Fall/Spring, 3 credit hour(s)*

This course is an introduction to the basic concepts of graph theory. Common classes, of graphs such as paths, trees and cycles are analyzed. We also consider connectivity, traversability, and conditions for planarity. Applications are given to chemistry, engineering and computer science. Map colorings (including the famous four color theorem) are also considered. Three lecture hours per week. Pre-

requisites: Calculus II (MATH 162) or permission of the instructor.

Prerequisites: MATH 162 or permission of the instructor.

MATH 401 REAL ANALYSIS *Fall/Spring, 4 credit hour(s)*

This course is a proof-based course that covers the fundamentals of mathematical analysis: definitions and theorems regarding point set topology (applied to the real numbers), convergence of sequences, subsequences and series of numbers, continuity and differentiability of functions, the theory and practice of the Riemann integral, the theoretical rationale regarding convergence or divergence of sequences and series, and Fourier series. Also covered are uniform continuity and uniform convergence, specifically when it relates to the change in the order of limit operations.

Prerequisites: MATH 263 and MATH 361 with a grade of C or better or permission of the instructor.

MATH 461 ADVANCED CALCULUS *Spring/Fall, 4 credit hour(s)*

This course is sequel to Calculus III and serves as an introduction to topics in Advanced Calculus. Topics include line, surface and volume integrals in two and three dimensional space; investigations of the gradient of a scalar field, discussion of conservative fields and potential functions; the divergence and curl of vector fields; generalizations of the fundamental theorem of calculus to evaluate integrals; curvilinear coordinates, multiple integrals and transformation of multiple integrals; implicit functions; Jacobians; partial derivatives; higher order partial derivatives; mean value theorems; infinite series; Taylor series and an introduction to Fourier series. Subject applications are given to fluid and solid mechanics, Electrostatics, and Electromagnetism.

Prerequisites: Calculus III (MATH 263) and Linear Algebra (MATH 361) with a grade of C or better or permission of the instructor.

MECH 101 DRAWING FOR ENGINEERS *Fall, 1 credit hour(s)*

Learn basic drawing skills including, sketching, geometric construction, measuring, isometrics, orthographic views, section views, dimensioning, auxiliary views, and sheet layout.

MECH 121 MANUFACTURING PROCESSES I *Fall/Spring, 3 credit hour(s)*

This applied learning course provides an introduction to material removal, casting, and heat treatment processes. The student begins with a fundamental understanding of machine tools theory and practice. Instruction includes precision layout and measurement, lathe operations and tooling, milling operations and tooling, drills, reamers, and drilling machines. Instruction involves the selection and calculation of proper cutting speeds and feeds for processes involving different materials.

Instruction also includes an investigation to the variety of casting processes, products produced through each process and common defects found. Students further investigate material properties and how change can occur through processing and heat treatments. The laboratory provides the opportunity to apply the material from lecture through the hands on operation of industrial tooling and equipment.

Course Descriptions: Mechanical

MECH 122 INTRODUCTION TO 3D PRINTING *Spring, 1 credit hour(s)*

This course introduces the fundamental concepts of 3D extrusion printer technology, operation, maintenance, and repair. The components and technology that make 3D printing possible are investigated before students learn the processes involved in moving from a parametric 3D model through the slicing software and then to printing. Fundamental skills like safety, maintenance, troubleshooting, and repair are introduced and practiced during the course. NOTE: In lieu of a textbook, students are required to purchase their own printer for this course. The recommended printer is a Creality Ender 3 which can be purchased through Amazon for \$189.00. We will unbox and assemble printers on day 1 of the course, so please purchase your printer prior to the start of the semester and bring it to Lab 1.

MECH 128 ELECTROMECHANICAL TECHNOLOGY *Spring, 3 credit hour(s)*

This course provides the knowledge base needed to understand the principles, concepts, and applications of electro-mechanics. It presents problem solving techniques that are critical for troubleshooting situations. Topics covered include: Nature of motion, simple and compound machines, torque, power transmission, motion devices, electric circuits, electromagnetic circuits and devices, and maintenance procedure for electrical and mechanical machines.

Prerequisites: College Algebra (MATH 121), College Physics I and Lab (PHYS 121/125).

MECH 151 3D MODELING *Spring, 2 credit hour(s)*

This course is an introduction to parametric design. The course covers parametric modeling fundamentals, solid geometry concepts, fundamentals of parametric constraints, geometric construction tools, use of symmetrical features, advanced 3D construction tools, sheet metal tools, and basic assembly modeling. Software implementation of the skills learned in MECH 101 and the creation of industry-accepted drawing sets are also covered.

Prerequisites: MECH 101

MECH 180 SURVEY OF ENGINEERING TRADES *Fall/Spring, 3 credit hour(s)*

This course provides introduction to some of the trade opportunities in the field of engineering and technology.

Students will gain introductory experience in the areas of welding, plumbing, heating, air conditioning, and residential electricity.

MECH 220 ENGINEERING MATERIALS *Spring, 3 credit hour(s)*

A study of the wide spectrum of materials used in manufacturing of discrete parts and machines. Materials structure, characteristics, mechanical properties and applications will be stressed for ferrous and non-ferrous metals, plastics, and composites.

Prerequisites: MATH 123, PHYS 121, or permission of instructor

MECH 221 MET LAB *Spring, 1 credit hour(s)*

In this course, students explore concepts related to statics, strengths, and materials courses through labs designed to reinforce key concepts. Students utilize knowledge and skills developed during the first two years of their engineering education to solve a simple design problem. Written communication skills are practiced and refined through the creation of lab reports documenting key information for each lab and/or design experiment.

Prerequisites: ENGS 101, Co-Requisites: ENGS 203, ENGS 205

MECH 223 INTRODUCTION TO CNC *Fall, 3 credit hour(s)*

A course designed to introduce students to the capabilities of CNC machine tools used in industry, to teach students the fundamentals in programming CNC lathes and milling machines, to provide students the opportunity to setup and operate CNC equipment and to experience the use of CAD/CAM technology. Two hours lecture, three hours laboratory per week.

Prerequisite: Manufacturing Processes I (MECH 121) or permission of instructor.

MECH 232 MACHINE DESIGN *Spring, 3 credit hour(s)*

Design of machine elements subjected to static, dynamic and fluctuating loads. Theory includes design of beams, shafts, mechanical power transmission devices. A design project is required for the course. The recitation session will be used for solving numerical problems and for consultation on the semester design project.

Prerequisites: Strength of Materials (CONS 272) or Engineering Strength of Materials (ENGS 203), or permission of instructor.

MECH 241 FLUID MECHANICS *Spring, 3 credit hour(s)*

This course develops a basic knowledge of fluids under static and dynamic applications. Properties of fluids, pressure, fluid statics, Bernoulli's and the energy equation are explored in respect to applications in the mechanical industry.

Flow rate, pipe sizing, and minor losses in piping systems are addressed.

MECH 242 FLUID POWER LAB *Spring/Fall, 1 credit hour(s)*

A study of force and motion in hydraulic and pneumatic systems, involving cylinders, pumps, valves, and accumulators. Electrical, hydraulic, and pneumatic controls will be studied, with an emphasis on sequential operation of fluid devices. Both electrical and fluid schematic diagrams will be produced.

Prerequisites: Corequisites: Fluid Mechanics (MECH 241) or permission of instructor.

MECH 261 MET ELECTRICITY *Fall/Spring, credit hour(s)*

Fundamentals of alternating current circuits.

Prerequisites: PHYS 122/126 or PHYS 132/136. Co-requisites: MATH 123

MECH 301 TECHNICAL DYNAMICS *Fall/Spring, 3 credit hour(s)*

Students study the principles of dynamics and the solution of applied engineering problems. Two-dimensional dynamic analysis of particles and rigid bodies are resolved using fundamental analytical methods and computer simulation. Rectilinear, curvilinear, and rotary motion, D'Alembert's principles of work and energy, impulse and momentum, and three-dimensional kinematics and dynamics are covered.

Prerequisites: Machine Design (MECH 232) or permission of instructor.

MECH 303 GEOMETRIC DIMENSIONING & TOLERANCE *Spring, 2 credit hour(s)*

Introduction to the terminology and applications of Geometric Dimensioning and Tolerancing (GD&T). Students learn and apply the key principles of the ASME Y14.5-20XX standard. Students read and interpret industry drawings with GD&T, create their own drawings utilizing GD&T, and fabricate and measure assembly parts to ensure compliance.

Prerequisites: MECH 121 (Manufacturing Processes) and MECH 102 (Parametric Modeling)

MECH 310 INSTRUMENTATION AND CONTROLS FOR MECHANICAL ENGINEERS *Spring, 3 credit hour(s)*

This course will introduce measurement, instrumentation, and control systems. Students explore analog and digital control. Furthermore, process controls will be introduced. Students will do various measurement case studies to control instrumentation and examine corrections on control.

Prerequisites: MECH 261 or ENGS 263/264 or ELEC 101/109, ENGS 102 or CITA 180, and junior status

MECH 312 ENGINEERING DESIGN *Spring, 3 credit hour(s)*

This course focuses on learning and practicing an industry-accepted process to design mechanical objects; students start with product discovery and a goal of delivering a viable product by the end of the semester. Sketching, hand drawing, parametric modeling, and GD&T are utilized in concert with written communication to document this process. Mathematical models and other principles learned in statics, strengths, materials, and machine design among others are used alongside measurements, tests, and experiments to evaluate and advance the design state. Hand tools, 3D printing, woodwork, and/or machine tools are utilized throughout this iterative process to experimentally verify generated concepts and test prototypes as appropriate.

Prerequisites: MECH 303, ENGS 350

MECH 322 ADVANCED 3D PRINTING *Fall, 2 credit hour(s)*

This course builds on the topics of Introduction to 3D Printing. Topics include print material selection, mechanical properties of printed parts, dual extrusion printing, volume optimization, large-scale prints, accuracy, sizing and tolerances, resin printers, functional prototypes & production, emerging

Course Descriptions: Mechanical, Mechatronics

technology, limitations of 3D printing and health risks. Weekly labs examine new topics and offer opportunities for introducing, practicing, and refining 3D printing skills with an emphasis on creating functional prototypes.

Prerequisites: MECH 122

MECH 332 INTERMEDIATE MACHINE DESIGN *Fall, 3 credit hour(s)*

This course is a continuation of MECH232 – Machine Design. Design of shafts, keys, couplings and seals provide application to tolerances and fits. The study of bearing types, loads, design life and selection along with fastener selection, machine frames, connection and joints; linear motion, motion control and electric motors and controls used in automated machinery.

Prerequisites: Machine Design (MECH 232) or permission of instructor.

MECH 341 INTERMEDIATE FLUID MECHANICS *Fall, 3 credit hour(s)*

This course is an intermediate step in students understanding of fluid mechanics. Topics include fluid kinematics, Bernoulli's equation, mass, energy, and momentum analysis of flow systems, internal flow, external flow, compressible flow, and differential analysis of fluid flows. The continuity, stream function, and Navier-Stokes equations are development for 2-D and 3-D flows. The introduction of similitude and dimensional analysis is also included.

Prerequisites: MECH 241 and 45 credits or more or permission of the instructor

MECH 342 THERMODYNAMICS *Spring, 3 credit hour(s)*

This course will investigate thermal power and its applications using the first and second laws of thermodynamics. The properties of liquids and gases will be considered in their current and emerging applications to energy production. The fuel sources will be discussed for their energy input and output heat values. The efficiency of all energy applications will be explored while evaluating the theory of heat transfer. Applications of the Rankin, Otto, Brayton, and refrigeration cycles will be used in evaluating the energy production of thermal systems.

Prerequisites: College Physics II (PHYS 122) and Calculus I (MATH 161), or permission of instructor.

MECH 343 HEAT TRANSFER *Fall/Spring, 3 credit hour(s)*

This course explores the various methods of transferring heat from a source to a sink in engineering systems. Topics will focus on the energy balance of a system. The transport phenomena of heat transfer will be studied in detail, allowing students to internalize these physical principles of conduction, convection, and radiation.

Prerequisites: College Physics II (PHYS 122) and Calculus I (MATH 161), or permission of instructor.

MECH 350 QUALITY IMPROVEMENT *Fall/Spring, 3 credit hour(s)*

Statistical concepts related to quality control and improvement. Theory, construction, and interpreta-

tion of control charts in an industrial manufacturing environment. Probability as it relates to acceptance sampling and ISO 9000 quality standards.

Prerequisites: Junior or senior level status

MECH 351 DESIGN OF EXPERIMENTS *Spring, 3 credit hour(s)*

This course provides methodologies that engineers, technologists, and management personnel need to plan and conduct experiments to quantify cause and effects relationships in complex systems. Design of experiments test multiple factors at one time determining whether changes to products, processes, and systems are improvements. Students will perform simple comparative experiments isolating known sources of variation; while multiple level factorial designs will allow analysis of variance (ANOVA) to predict models of interactions that optimize a process.

Prerequisites: Calculus I (MATH 161) and Junior level status, or permission of instructor.

MECH 377 CAPSTONE I *Fall, 2 credit hour(s)*

This course is the first course in a two-semester course sequence in the development of a senior design project. Students define a project, define the product to be designed, and engage in conceptual design work to prepare for the second semester course and completion of the design project. During this process, students engage in project discovery, selection, planning tasks, research, and product definition. Students generate multiple design concepts and perform analyses supporting the evaluation thereof, document the advancement of the design state, and present their work in a series of design reviews.

Prerequisites: MECH 312

MECH 412 VIBRATIONS AND NOISE CONTROL *Fall/Spring, 3 credit hour(s)*

The objective of this course is to provide students with relevant skills to model and analyze vibrating mechanical systems and equipment. Instruction includes methods for solving free, harmonic, and general forced responses and the design of suppression systems. Students gain experience with accelerometers and varies other tools needed to measure vibration and how to mitigate noise due to vibration.

Prerequisites: MECH 241 and junior level status or permission of the instructor.

MECH 416 APPLIED COMPUTATIONAL FLUID DYNAMICS *Fall/Spring, 3 credit hour(s)*

This course introduces the student to modeling and analyzing fluid mechanics problems via the finite difference and finite volume method. Fundamentals of CFD theory, solution, procedures, techniques, and analysis are discussed. Topics include computational grid generation, fluid model setup, convergence and accuracy analysis, data interpretation, model validation and discussion of conclusions. Students will use CFD software to solve various fluid problems.

Prerequisites: Intermediate Fluid Mechanics (MECH 341), Differential Equations (MATH 262), or permission of instructor.

MECH 417 APPLIED FINITE ELEMENT METHOD *Fall/Spring, 3 credit hour(s)*

This course introduces the student to modeling and analysis of mechanical systems via the finite element method. Topics include the theory and procedures to design computer models to simulate various applied mechanical problems, validation of computer models, and interpretation of numerical results, mesh and accuracy analysis, and discussion of conclusions. Students will use FEM software to solve various mechanical and heat transfer problems.

Prerequisites: Machine Design (MECH 232), Differential Equations (MATH 262), or permission of instructor

MECH 443 TECHNICAL PROPULSIONS *Fall, 3 credit hour(s)*

This course investigates propulsion systems. Conservation of momentum, mass, and energy are applied to many types of propulsion systems. The course examines and analyzes propeller design (airplane and boat), turbojets, turboprops, ramjets, and rockets.

Prerequisites: MECH 301, MECH 342, and MATH 364 - Co-requisites: MECH 341

MECH 477 CAPSTONE II *Spring, 3 credit hour(s)*

This is the second semester course in the senior design project process that builds upon work completed in MECH 377. Students continue the design process started in the previous course by developing and testing a product from their proposed concept design. Design for Performance, Cost, Manufacture, Assembly, Reliability, and Sustainability evaluations are utilized to refine the product for final production. Product support activities, including developing a design report and project portfolio, ensure design knowledge is retained, and the product supported beyond the end of the course. Students present their design work for review at multiple points throughout the course.

Prerequisites: MECH 377

MECH 480 CO-OP EXPERIENCE IN MECHANICAL TECHNOLOGY *Spring, 1-6 credit hour(s)*

The course provides real world learning experience through professional cooperative education placement in a private/public organization related to the student's academic objectives and career goals. This course requires students to be involved in the design, fabrication, and testing of a system, a component, a software, or a machine where real world constraints such as manufacturability, reliability, safety, environment, aesthetics, and costs are important. In addition to their work experience, students are required to submit bi-weekly reaction papers and an academic portfolio and presentation to a Faculty Coordinator.

Prerequisites: Junior standing, consent of academic advisor, approval by Dean of CSOET.

MKTX 215 DIGITAL FUNDAMENTALS AND LOGIC DESIGN *Fall, 3 credit hour(s)*

The topics covered in this course are: number systems, logic operations and codes, logic gates,

Course Descriptions: Mechatronics, Powersports, Music, NCR

Boolean algebra and logic simplification, combinational logic analysis, functions of combinational logic, latches, flip-flops, counters and shift registers. Digital to Analog and Analog to Digital converters and Semiconductor memories are also covered.

Prerequisites: CITA 152, ENGS 102, and PHYS 132/136

MKTX 310 **INSTRUMENTATION AND CONTROLS** *Spring, 3 credit hour(s)*

This course will introduce instrumentation systems, process measurements, and process control. Specifically, the course will discuss measurement terminology, differentiating between analog and digital, describe the instrumentation used for electronic testing and develop the principles of operation of transducers used for process measurement and control.

Prerequisites: ENGS 263/264 Electric Circuit/Lab

MKTX 320 **MECHATRONICS LABORATORY I** *Fall, 1 credit hour(s)*

In this laboratory, the experiments are designed to give students hands on experience with components and measurement equipment used in the design of mechatronic products. Students learn the functions of operational amplifier, diodes/LEDs, Transistors, relays, sensor, and digital components.

Prerequisites: ENGS 264 Electric Circuit Lab, MKTX 216 Digital Fundamentals and Logic Design Lab

MKTX 325 **MICROCONTROLLERS** *Spring, 3 credit hour(s)*

This course introduces microcontrollers. The fundamental skills needed to understand, use, and design microcontroller-based systems are explored. The course focuses on 8-bit microcontroller architecture.

Prerequisites: MKTX 215/216 Digital Fundamentals and Logic Design/Laboratory

MKTX 370 **MECHATRONICS LABORATORY II** *Spring, 1 credit hour(s)*

This mechatronics laboratory emphasizes the applications of analog electronics, digital electronics, sensors and transducers, actuators, and microcontrollers. Laboratory experiments are designed to give the student hands-on experience with components and measurement equipment used in the design of mechatronic products. Design and construction of mechatronics systems are emphasized.

Prerequisites: MKTX 310 Instrumentation and Control - Corequisites: MKTX 325 Microcontroller

MKTX 410 **ROBOTICS ANALYSIS AND SYNTHESIS** *Fall, 3 credit hour(s)*

This course teaches the fundamentals of robotics through implementation of control theory and high level system dynamics and modeling. Students write computer code, implement system controllers, use sensory equipment, collect and analyze data, and design and develop robotic systems.

Prerequisites: MKTX 310 Instrumentation and Controls

MKTX 477 **MECHATRONICS CAPSTONE I** *Fall, 2 credit hour(s)*

This is the first of a two course sequence for Mechatronics Capstone Project where students address open-ended problems.

Prerequisites: Senior standing in Mechatronics or permission of instructor.

MKTX 478 **MECHATRONICS CAPSTONE II** *Spring, 2 credit hour(s)*

This is the second of a two-course sequence for Mechatronics Capstone project where students demonstrate the proposed problem resolution.

Prerequisites: MKTX 477 Mechatronics Capstone I

MSPT 101 **POWERSPORTS SERVICE** *Fall, 3 credit hour(s)*

This course is an introduction to the general theories of system and maintenance of powersports vehicles, including motorcycles, snowmobiles and all-terrain vehicles.

MSPT 110 **ENGINE AND POWER TRANSMISSION SERVICE** *Spring, 4 credit hour(s)*

This course involves the complete disassembly, inspection, repair and reassembly of modern modular constructed powertrain assemblies. The principles of operations key to high performance, compact engines/transmission assemblies are thoroughly covered.

Prerequisites: Powersports Service (MSPT 101) or permission of instructor.

MSPT 112 **POWERSPORTS ELECTRICAL SYSTEMS** *Fall, 3 credit hour(s)*

This course is a study of fundamental electrical circuits and relative theory as applied to powersports machines. Series, parallel, series-parallel circuits, magnetism, direct and alternating current fundamentals; batteries, charging systems, starters, lighting systems, and basic electronics are studied.

Prerequisites: None - Corequisite: MSPT 122 Powersports Electrical Lab or with permission of instructor.

MSPT 113 **POWERSPORTS ENGINE DIAGNOSTICS** *Spring, 3 credit hour(s)*

With the completion of this of this course of study, the student will be able to diagnose and repair a machine with a no-start condition resulting from a fuel or ignition problem. Knowledge and understanding of sophisticated engine fuel and ignition systems is the focus of this course. Students study primary ignition circuits, secondary firing, points and condenser, magneto, capacitor discharge, hall-effect and transistor theory. Electronic computer scanners, gages and other diagnostic devices are used throughout the course. Study of fuel systems begins with fuel delivery and includes electronic fuel injection.

Prerequisites: MSPT 101 Powersports Service, MSPT 112 Powersports Electrical Systems Lab, or with permission of instructor. - Corequisite: MSPT 114 Powersports Engine Diagnostics Labor with the permission of the instructor

MSPT 114 **POWERSPORTS ENGINE DIAGNOSTICS LAB** *Spring, 1 credit hour(s)*

The Laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, both hard-copy and electronic, while testing systems with digital volt/ohm meters and computer scanners. Fuel and powertrain control systems are diagnosed with the latest tools available. With the completion of both lecture and lab, (MSPT 113 and MSPT 114) students will be able to diagnose and repair a machine with a no-start condition resulting from a fuel or ignition problem. The student will be able to access computer information, including inputs, outputs, and miscellaneous tests.

Prerequisites: None - Corequisite: MSPT 113 or with the permission of the instructor

MSPT 120 **FRAME AND SUSPENSION SYSTEMS** *Spring, 3 credit hour(s)*

This course covers the theory, diagnostic and service procedures used in suspension and frame systems unique to the Powersports arena. Braking and suspension concerns are integrated into frame design theory.

Prerequisites: Powersports Service (MSPT 101) or permission of instructor.

MSPT 122 **POWERSPORTS ELECTRIC SYSTEMS LAB** *Fall, 1 credit hour(s)*

The laboratory component of this course consists of hands-on activities involving theories learned in the classroom. Students use service information, both hard-copy and electronic. Testing involves batteries; series, parallel, and series-parallel circuits, as well as charging and starting systems component identification and service.

Prerequisites: None - Corequisite: MSPT 112 or with the permission of the instructor

MSPT 130, **MARINE PROPULSION SYSTEMS** *Fall, 3 credit hour(s)*

A study of the different types of propulsion systems relative to various types of aquatic craft, including jet and propeller will be studied. The theory and construction of propulsion systems will be discussed.

MUSC 101 **INTRODUCTION TO MUSIC** *Fall, 3 credit hour(s)*

Introduction to Music samples 500 years of music history and includes units on classical, blues, jazz, popular, Broadway, film, and world music. In the process, it gives the student the tools needed to analyze and evaluate music in a variety of styles for lifelong growth.

NCR N02 **SOLAR READY VETS** *Fall/Spring/Winter/Summer, 0 credit hour(s)*

The Solar Ready Vets Program is a national training program created by the United States Department of Energy, which is designed to get transitioning soldiers and jobs in the solar industry. The program is a five week 200 hour training program that covers the material needed to pass the North American Board of Certified Energy

Course Descriptions: NCR, Nursing

Practitioners (NABCEP) PV associate exam, basic electricity, system design basics, cost justification, safety training, hands on training with solar equipment, completing a solar PV installation, resume writing, interview techniques, and opportunities to interview with solar companies. The course is delivered over five weeks with classes running daily for eight hours per day.

NCR N03 CDL - COMMERCIAL DRIVER LICENSE TRAINING

Fall/Spring/Summer, 0 credit hour(s)

CDL (Commercial Driver License) Training will provide the student with the required knowledge and skills to pass the New York State Department of Motor Vehicles, Road Test, for the class of license they wish to receive, Class A or B. The program is 50 hours consisting of 20 hours classroom training and 30 hours if individual behind the wheel training with an instructor. Major topics covered are; Driving Skills, Safety, Vehicle Controls, Mechanical Systems and Documentation requirements. The course is delivered over a time period, with evening classes and individual behind the wheel hours scheduled between the student and instructor.

NCR N04 CERTIFIED CLINICAL MEDICAL ASSISTANT

Fall/Winter/Spring/Summer, 0 credit hour(s)

The Clinical Medical Assistant course is designed to prepare students to function as professionals in multiple healthcare settings. Medical assistants with a clinical background perform various clinical tasks including assisting with the administration of medications and with minor procedures, performing an EKG electrocardiogram, obtaining laboratory specimens for testing, educating patients, and other related tasks. Job opportunities are prevalent with physician's offices, clinics, chiropractor's offices, hospitals and outpatient facilities. The course is delivered over 14 weeks containing 140 classroom hours. After classroom training is complete there will be a clinical experience of 160 clinical hours at a local health organization.

NURS 101 FUNDAMENTALS OF NURSING

Fall, 6 credit hour(s)

This course provides the student with knowledge and skills basic to nursing. Clinical experiences assist students in applying NURS 101 theory to client care. Skills performed in the nursing laboratory on campus facilitate the transfer of knowledge from the classroom to the clinical setting. Three hours lecture, three hours laboratory, and a six-hour clinical component required weekly.

Prerequisites: Pharmacology I (NURS 103), Nursing Seminar (NURS 105), Anatomy and Physiology I (BIOL 217), Composition and the Spoken Word (ENGL 101). NURSING MAJORS ONLY.

NURS 103 PHARMACOLOGY I

Fall, 1 credit hour(s)

This introductory pharmacology course will explore the basic principles surrounding pharmacology. Topics include basic pharmacological principles, dosage calculations, regulatory compliance, patient education, and reduction of medication errors. Restricted to nursing students.

Prerequisites: Fundamentals of Nursing (NURS

101), Nursing Seminar (NURS 105), and Composition & the Spoken Word (ENGL 101). NURSING MAJORS ONLY or permission of instructor.

NURS 104 PHARMACOLOGY II

Spring, 1 credit hour(s)

This pharmacology course explores the various classifications of drugs, and their associated nursing care. Drugs used to treat psychiatric, reproductive, bone/joint disorders, analgesics, and those commonly used during pregnancy will specifically be discussed.

Prerequisites: Pharmacology I (NURS 103), Fundamentals of Nursing (NURS 101), Mental Health Nursing (NURS 106), Maternal/Child Nursing (NURS 107), or permission of instructor.

NURSING MAJORS ONLY.

NURS 105 NURSING SEMINAR

Fall, 1 credit hour(s)

This course serves as an introduction to the nursing program. It includes differentiating a program of study from individual courses: clarifying experiences; learning study skills and test taking strategies; practicing stress and coping techniques; and enhancing organizational and time management skills. Students explore critical thinking within the context of nursing. The seminar format provides an opportunity to apply critical thinking to current coursework. Attendance with active participation in discussions is expected. Attendance is required in this course because of the importance of dialogue in thinking and learning. The different viewpoints shared during the seminar will help expand the thinking of all participants.

Prerequisites: Nursing Students Only

NURS 106 MATERNAL NEWBORN NURSING

Spring, 4.5 credit hour(s)

Concepts from nursing fundamentals are adapted to the nursing care of the family. The course emphasizes utilization of all components of the nursing process in caring for individuals, within the context of family and community, during the childbearing period. Concepts of pregnancy, labor and delivery, post-partum, and newborn will be discussed. The student will build on skills using the nursing process and critical thinking to meet maternal health care needs within the family system. Clinical experiences are provided in area hospitals, community agencies and women's health clinics.

Prerequisites: NURS 101, NURS 103, NURS 105, BIOL 217, ENGL 101,

Completion of Infection Control and Child Abuse Courses - Corequisites: BIOL 218, NURS 104, NURS 107, PSYC 101

NURS 107 MENTAL HEALTH NURSING

Spring, 4.5 credit hour(s)

This course offers an examination of concepts and theories related to psychiatric and mental health nursing within the context of the therapeutic relationship.

Aspects of primary, secondary, and tertiary prevention are addressed as a basis for promoting and sustaining optimum mental health functioning. Emphasis is placed on relationship-centered care, teamwork, quality and safety for diverse patient populations with psychiatric disorders.

Prerequisites: BIOL 217, NURS 101, NURS 103 and NURS 105; and ENGL 101. - Co-requisites: BIOL 218, NURS 104, NURS 106, PSYC 101

NURS 200 PHARMACOLOGY III

Fall, 1 credit hour(s)

This course explores classifications of drugs used to treat fluid and electrolyte imbalances, infection and cancer. Additionally, drugs used in the treatment of respiratory gastro-intestinal, and endocrine disorders will be discussed.

Prerequisites: Pharmacology II (NURS 104), Mental Health Nursing (NURS 107), and Maternal/Child Nursing (NURS 106). NURSING MAJORS ONLY.

NURS 201 MEDICAL-SURGICAL NURSING I

Fall, 10 credit hour(s)

Course content focuses on application of nursing process to care of pediatric and adult patients experiencing medical-surgical conditions along the health-illness continuum. Topics covered include those related to acute/complex respiratory, endocrinology, gastrointestinal, oncologic, musculoskeletal and fluid, electrolyte and acid-base disorders. Students apply their learning to clients in medical-surgical clinical settings. Skills performed in the nursing laboratory on campus facilitate the transfer of knowledge from the classroom to the clinical setting. Six hours lecture, two hours laboratory, and a nine-hour clinical component required weekly.

Prerequisites: BIOL 217, NURS 106, NURS 107. - Co-requisites: BIOL 209, BIOL 218, NURS 200, PSYC 225. NURSING MAJORS ONLY.

NURS 202 MEDICAL-SURGICAL NURSING II

Spring, 10 credit hour(s)

This course focuses on application of nursing process to care of pediatric and adult patients experiencing medical-surgical conditions along the health-illness continuum. Topics covered include those related to acute/complex cardiovascular, neurologic, hematologic, integumentary, immunologic, sensory, reproductive, emergency, and disaster events or disorders. Students will apply their learning to clients in medical-surgical clinical settings. Skills performed in the nursing laboratory on campus facilitate the transfer of knowledge from the classroom to the clinical setting.

Prerequisites: NURS 106, NURS 107, NURS 201, BIOL 209, PSYC 225 - Co-requisites: NURS 204. NURSING MAJORS ONLY.

NURS 203 PROFESSIONAL ISSUES AND TRENDS IN NURSING

Spring, 1 credit hour(s)

Students explore and analyze socio-economic and political variables that affect professional nursing and healthcare. Students examine the professional growth and transition of the student nurse, current issues in healthcare, nursing management, and career development.

Prerequisites: NURS 200, NURS 201, BIOL 208, SOCI 101 - Co-requisites: NURS 202, NURS 204

Course Descriptions: Nursing, Physical Therapist Assistant

NURS 204 PHARMACOLOGY IV

Spring, 1 credit hour(s)

This course explores nursing care associated with the classifications of drugs used to treat cardiovascular, blood, sensory, neurological, immune, and skin disorders. In addition, drugs used in the emergency setting will be examined.

Prerequisites: NURS 200, NURS 201, and NURS 202. NURSING MAJORS ONLY.

NURS 300 CONCEPTUAL FRAMEWORKS IN NURSING

Fall/Spring, 3 credit hour(s)

This course examines the historical development and evolution of nursing theory and its interrelationship to research and professional nursing practice. The course includes critical thinking activities used to conceptualize, apply, analyze, and synthesize knowledge related to specific nursing theories and their importance in nursing education, practice, and research. A group project that incorporates the students' knowledge of nursing theory and nursing theorists will be used to demonstrate an understanding of the relevance of theory to practice.

Prerequisites: Students must be enrolled in the RN-BS program or permission of instructor.

NURS 302 LEGAL & ETHICAL ISSUES IN HEALTH CARE

Spring, 3 credit hour(s)

The student will examine the legal and ethical issues related to health care as they impact the health services and health care decision making. A variety of commonly experienced legal situations and ethical dilemmas will be discussed, including professional liability, patients' rights, abortion, AIDS care, informed consent, organ transplantation, health care delivery and resource allocation and issues related to death and dying.

Prerequisites: Students must be enrolled in the RN-BS program or permission of instructor.

NURS 303 HEALTH ASSESSMENT IN NURSING

Fall, 4 credit hour(s)

This course will provide the student with knowledge and skills basic to health assessment in nursing. The course emphasizes critical thinking skills required for accurate collection and analysis of client health information and provides opportunities for enhancement of physical assessment skills. Students will be responsible for finding a qualified preceptor (with the approval of the course instructor) in order to successfully complete the clinical portion of this course.

Prerequisites: Students must be admitted into the RN-BS program or permission of instructor.

NURS 304 HEALTH PROMOTION AND RESTORATION

Spring, 3 credit hour(s)

This course provides the student with knowledge of the major individual and community models and theories that guide health-promotion interventions across the life span. This course presents information that enhances the students' ability to provide holistic health promotion and preventive care. The planning, implementing and evaluating of health promotion, prevention, and restoration activities for individuals, families, and communities is stressed.

Prerequisites: NURS 300 and NURS 303.

NURS 370 RESEARCH METHODS IN HEALTH SCIENCES

Fall/Spring, 3 credit hour(s)

The purpose of this course is to understand and apply research findings to practice.

Prerequisites: Enrolled in RN-BS, Statistics (MATH 141) or equivalent coursework or permission of instructor.

NURS 400 NURSING MANAGEMENT AND LEADERSHIP

Spring, 3 credit hour(s)

This course introduces the student to the conceptual basis for the application of leadership and management principles. The student gains a better understanding of the application of these principles in the management and coordination of health care delivery systems. Exploration of the critical components of leadership and management in diverse health care settings and application of course content enhances the coordination of quality client care and the role of the nurse as a leader and manager. Two hours lecture per week and 45 hour preceptorship.

Prerequisites: Conceptual Frameworks in Nursing (NURS 300), Legal and Ethical Issues in Health Care (NURS 302), Health Assessment in Nursing (NURS 303), Health Promotion and Restoration in Nursing (NURS 304) or permission of instructor. Writing intensive course.

NURS 402 COMMUNITY HEALTH NURSING

Fall, 4 credit hour(s)

This course will examine public and community health theory and practice as they relate to the Registered Professional Nurse. Public health principles, epidemiology, and community health nursing theory will be utilized by the student in conducting a community health assessment and implementation of a service-learning project within the community. Four hours lecture per week, Service Learning Project.

Prerequisites: Conceptual Frameworks in Nursing, (NURS 300), Health Assessment in Nursing (NURS 303), Health Promotion and Restoration (NURS 304), Research Methods in the Health Sciences (NURS 370), or permission of instructor.

NURS 403 TRANSCULTURAL NURSING

Spring, 2 credit hour(s)

This course provides the student with an overview of the influence of culture on health care practices and in the delivery of nursing care for individuals, groups, and communities. Increased awareness of culturally diverse nursing care and a sound understanding of the impact of cultural beliefs, values, and practices upon health and health care delivery is a direct outcome of this course. The student explores and reflects upon their own cultural beliefs related to health and health care delivery and examines client behaviors, cultural perspectives, and barriers to transcultural communication.

PHTA 100 PTA SEMINAR I

Fall, 2 credit hour(s)

This is the first in a series of four courses in the physical therapist assistant program that is based on the APTA's Core Values for the Physical Therapist

and Physical Therapist Assistant. In this course, students are introduced and acclimated to the Physical Therapist Assistant program and the physical therapy profession. Students are familiarized with the Core Values of accountability, altruism, collaboration, compassion and caring, duty, excellence, inclusion, integrity, and social responsibility. Orientation to the clinical education process is included in preparation for full time clinical experiences.

Prerequisites: PHTA majors only

PHTA 101 FUNDAMENTAL PHYSICAL THERAPY PROCEDURES

Fall, 4 credit hour(s)

In this course, students are introduced to basic physical therapy procedures necessary for providing patient care across the continuum of physical therapy settings. Students develop competency in basic infection control procedures, data collection, bed mobility, transfers, gait training with assistive devices, wheelchair management, application of thermal modalities, basic therapeutic exercise, and soft tissue techniques. Introduction to tissue healing, kinesiology concepts and review of basic musculoskeletal anatomy is included. Students learn aspects of patient/client management including the ICF model, problem-solving algorithm, documentation and billing aspects of physical therapy care.

Prerequisites: PHTA majors only.

PHTA 102 FUNCTIONAL ANATOMY

Spring, 3 credit hour(s)

In this course, students apply knowledge of origins, insertions, actions and innervations of extremity and trunk musculature as they relate to functional human movement.

Students will apply this knowledge to analysis of the gait cycle and posture as well as in data collection related to the musculoskeletal system, to include manual muscle testing, goniometry, and muscle length testing. They are introduced to orthopedic special tests as well as the implementation of standardized functional outcome measures for physical therapy practice.

Prerequisites: PHTA 100, PHTA 101, Grade of C or better in BIOL 217.

PHTA 103 MUSCULOSKELETAL PATHOLOGIES

Spring, 4 credit hour(s)

In this course students study specific musculoskeletal pathologies across the life span. Students learn their role in assisting the physical therapist with management of an orthopedic based patient population in relation to stages of tissue healing. They will learn a variety of therapeutic exercise and soft tissue techniques for the extremities and the spine to address impairments and activity limitations. Students will develop clinical reasoning skills using the problem-solving algorithm framework to carry out the physical therapy plan of care in the context of musculoskeletal case-based scenarios. Documentation and billing practices will be incorporated into case assignments in preparation for clinical practice.

Prerequisites: PHTA 100, PHTA 101, BIOL 217, or permission of instructor.

Course Descriptions: Physical Therapist Assistant, Physics

PHTA 104 CLINICAL I

Summer, 4 credit hour(s)

In this course, the student is assigned to a physical therapy clinical site where they work full time under the direct supervision of a licensed physical therapist or physical therapist assistant. This provides the student with the opportunity to put the knowledge and skills acquired in the classroom and laboratory into practice in the clinical setting. A strong emphasis is placed on communication and professional behaviors.

Prerequisites: PHTA 102, PHTA 103, PHTA 107.

PHTA 105 MUSCULOSKELETAL ASSESSMENT

Spring, 2 credit hour(s)

In this course, students are introduced to data collection methods used to assist the physical therapist with assessment of the musculoskeletal system, including the role of the PTA in the assessment process. Students will develop skill in assessment of muscle strength and range of motion using goniometry and manual muscle testing. Students will be taught soft tissue mobilization techniques for assessment and treatment of common musculoskeletal impairments.

Prerequisites: PHTA 100, PHTA 101, BIOL 217.

PHTA 107 PTA SEMINAR II

Spring, 1 credit hour(s)

In this course, students will build on knowledge and skills developed in PHTA 100 with an emphasis on preparation for clinical experiences.

Students will explore topics such as communication styles, time and life management strategies, concepts of teaching and learning, evidence-based practice, and legal, supervisory, and reimbursement issues related to practice as a student PTA. They will complete all pre-clinical documentation and Clinical Performance Instrument training in preparation for Clinical I.

Prerequisites: PHTA 100, PHTA 101.

PHTA 203 PTA SEMINAR III

Fall, 2 credit hour(s)

This seminar course allows second year PTA students to engage in activities and discussions to further integrate the Core Values of the PT and PTA, building on concepts introduced in PHTA 100 and PHTA 107. Guest speakers, class assignments and group discussion as well as outside activities will promote students' integration of the American Physical Therapy Association Core Values of accountability, altruism, collaboration, compassion/caring, duty, excellence, inclusion, integrity, and social responsibility, in preparation for culminating clinical experiences and clinical practice as a Physical Therapist Assistant.

Prerequisites: PHTA 104

PHTA 204 CARDIOPULMONARY AND INTEGUMENTARY PATHOLOGIES

Fall, 4 credit hour(s)

In this course, students will apply musculoskeletal knowledge from the previous semester to amputee and prosthetic rehabilitation, and orthotics. Students will study the cardiovascular, pulmonary,

and lymphatic systems and related pathologies. Cardiopulmonary rehabilitation principles and management will be discussed and applied, including management in the acute care/critical care environment. Conditions of the integumentary system will be discussed with emphasis on physical therapy management of wounds and burns.

Prerequisites: PHTA 104, BIOL 217, BIOL 218

PHTA 205 NEUROMUSCULAR PATHOLOGIES

Fall, 4 credit hour(s)

In this course, students study neuroanatomy and relate this knowledge to central and peripheral nervous system conditions. Principles of neurological rehabilitation and management of patients with neurological conditions are discussed and applied. Students learn about normal motor development, theories of motor control and motor learning as applied to the rehabilitation of patients with neuromuscular conditions.

Prerequisites: PHTA 104, BIOL 217, BIOL 218

PHTA 206 ADVANCED PHYSICAL THERAPY PROCEDURES

Fall, 2 credit hour(s)

In this course students learn basic principles of electricity and application of electrotherapeutic agents for pain control, neuromuscular stimulation, and tissue healing. Students learn the application of spinal traction as a therapeutic modality.

Specialty topics will be presented by guest clinicians and/or through case study introduction to prepare students for specialty populations and advanced therapeutic techniques they may encounter in final clinical experiences. Students will study pathophysiology of the endocrine/metabolic, gastrointestinal, hematologic, hepatic/biliary, renal and urologic systems as they relate to physical therapy management of a patient.

Prerequisites: PHTA 104, BIOL 217, BIOL 218

PHTA 207 CLINICAL II

Spring, 6 credit hour(s)

This clinical experience correlates with content taught in PHTA 100 through PHTA 206. The student is assigned to a physical therapy clinical site where they will work under the direct supervision of a licensed physical therapist or physical therapist assistant. This will provide the student with the opportunity to put the knowledge and skills learned in the classroom and laboratory into practice in a clinical setting. The PTA student will demonstrate clinical problem-solving skills based on academic knowledge and previous lab and clinical experiences.

Prerequisites: PHTA 203, PHTA 204, PHTA 205, PHTA 206

PHTA 209 CLINICAL III

Spring, 6 credit hour(s)

This clinical experience correlates with content taught in PHTA 100 through PHTA 207. The student is assigned to a physical therapy clinical site where they will work under the direct supervision of a licensed physical therapist or physical therapist assistant. This will provide the student with the opportunity to put the knowledge and skills learned in the classroom and laboratory into practice in a clinical setting with the expectation of entry level practice at the end of the clinical course. The PTA

student will demonstrate clinical problem-solving skills based on academic knowledge and previous lab and clinical experiences.

Prerequisites: PHTA 207

PHTA 210 PTA SEMINAR IV

Spring, 2 credit hour(s)

This course is designed to provide for the transition from the student role to the graduate role. Review of national exam material on a weekly basis throughout the semester will help to prepare students for the licensing exam. Students will participate in transitional activities completing licensure paperwork, participate in a mock interview and sit for a mock national exam. Students will be required to submit a self-directed plan for career development and lifelong learning. A final advocacy project and reflective paper provide an opportunity for students to demonstrate their growth and preparation to effectively fulfill their role as an inclusive healthcare provider.

Prerequisites: PHTA 203, PHTA 204, PHTA 205, PHTA 206

PHYS 108 TECHNICAL PHYSICS

Spring, 4 credit hour(s)

This course is designed to introduce students to the physical laws and principles inherent in the study of mechanics, wave mechanics, optics, electricity and magnetism; time permitting modern physics. There will be emphasis placed on the following topics: vibrations and waves, electricity and magnetism, and wave optics. Dimensional analysis and problem solving will be stressed.

Prerequisites: MATH 136 or permission of instructor

PHYS 115 BASIC PHYSICS

Fall/Spring, 4 credit hour(s)

Topical coverage includes systems of units, scientific method, scientific mathematics (including basic trigonometric functions), vectors, friction, forces and translational equilibrium, torques and rotational equilibrium, uniformly accelerated motion, Newton's Laws, work, energy, and power. Emphasis is on development of laboratory and problem solving skills including description, organization, analysis, summarization, and criticism in accordance with the scientific method.

Prerequisites: MATH 100 or permission of instructor. No science background is assumed.

PHYS 121 COLLEGE PHYSICS I

Fall/Spring, 3 credit hour(s)

This is an introductory college physics course which uses algebra and trigonometry in developing some of the fundamental concepts of classical physics. Topics covered are units of measurement, vectors, velocity, acceleration, force, Newton's Laws of Motion, gravity, momentum, work, energy, power, circular motion, rotational motion and thermodynamics.

Prerequisites: None. Co-requisite: MATH 121 or its equivalent.

Course Descriptions: Physics, Political Science

PHYS 122
COLLEGE PHYSICS II
Spring, 3 credit hour(s), GER 2

This is the second semester of an introductory college physics course which uses algebra and trigonometry in developing some of the fundamental concepts of classical physics. Topics covered are electrical forces and fields, electrical energy, capacitance and resistance, direct current circuits, reflection and refraction of light, wave optics.

Prerequisites: PHYS 121 or permission of instructor.

PHYS 125
PHYSICS LAB I
Fall/Spring, 1 credit hour(s), GER 2

Physics Laboratory I is a laboratory course to accompany PHYS 121 (College Physics I). Students will have laboratory experiments concerning one and two dimensional translational mechanics and graphical analysis.

Prerequisites: None. Co-requisite: PHYS 121 or permission of instructor.

PHYS 126
PHYSICS LAB II
Spring, 1 credit hour(s), GER 2

This is a laboratory course to accompany College Physics 2, PHYS122. Experiments examine electricity, DC circuits, and optics.

Prerequisites: None. Co-requisite: PHYS 122 or PHYS 132, or permission of instructor.

PHYS 131
UNIVERSITY PHYSICS I
Fall/Spring, 3 credit hour(s)

This is an introductory college physics course which uses basic calculus in developing some of the fundamental concepts of classical physics. Topics covered are measurement, vector manipulation (including unit vector notation), linear kinematics and dynamics, motion in a plane, and conservation of energy and linear momentum.

Prerequisites: None. Co-requisite: MATH 161 or permission of instructor.

PHYS 132
UNIVERSITY PHYSICS II
Spring, 3 credit hour(s)

This calculus based course covers topics in the area of electricity, magnetism and optics. Topics include electric fields, electric potential, conductivity, capacitance, magnetic fields, inductance, DC circuits, EM waves, geometric optics and physical optics.

Prerequisites: PHYS 131. Co-requisite: MATH 162, or permission of instructor

PHYS 133
UNIVERSITY PHYSICS III
Fall, 3 credit hour(s), GER 2

This is the third semester of an introductory college physics course which uses basic calculus in developing some of the fundamental concepts of classical physics. Topics covered are rotation of rigid objects, static equilibrium of extended bodies, simple harmonic motion, gravitation, fluid mechanics, the law of thermodynamics and kinetic theory of gases.

Prerequisites: PHYS 131. Co-requisite: MATH 162 or permission of instructor.

PHYS 135
UNIVERSITY PHYSICS LAB I
Fall, 1 credit hour(s), GER 2

This is a laboratory course to accompany PHYS 131, University Physics I. Experiments will include one and two dimensional translational mechanics and graphical analysis.

Prerequisites: None. Co-requisite: PHYS 131 or permission of instructor.

PHYS 136
UNIVERSITY PHYSICS LAB II
Spring, 1 credit hour(s), GER 2

This is a laboratory course to accompany University Physics II (PHYS 132). Experiments examine electricity, circuits, and optics.

Prerequisites: PHYS 132 or permission of instructor.

PHYS 137
UNIVERSITY PHYSICS LAB III
Fall, 1 credit hour(s), GER 2

This laboratory course is to accompany University Physics III (PHYS 133). The student will perform experiments related to rotational motion, oscillations and waves, static equilibrium, properties of material, and thermal physics.

Prerequisites: None. Co-requisite: PHYS 133 or permission of instructor.

PHYS 202
MODERN PHYSICS
Spring, 3 credit hour(s)

The atomic view of matter, Bohr model, relativity, particle properties of waves, wave properties of particles, introduction to quantum mechanics, quantum theory of the hydrogen atom, the solid state, introduction to Fourier series and integrals and statistical mechanics.

Prerequisites: PHYS 132 or permission of instructor.

PHYS 301
INTRODUCTION TO PHOTONICS
Fall/Spring, 3 credit hour(s)

This course explores the production and nature of light including: the laws of reflection and refraction, theory of image formation, principles of wave optics (including interference, diffraction and polarization), fundamentals of fiber optic theory, principles of lasers and laser safety, and the basics of holography with image processing. Throughout the course, emphasis is placed on applications of photonics in medicine, transportation, manufacturing, communications, environmental monitoring and consumer devices.

Prerequisites: PHYS 122 or PHYS 132, or permission of instructor.

PHYS 330
INTRODUCTION TO CLASSICAL MECHANICS
Fall/Spring, 3 credit hour(s)

This course is a presentation of Newtonian mechanics at the intermediate level. Topics include dynamics of particles and rigid bodies, rotating reference frames, conservation laws, gravitational fields and potentials, planetary motion, wave motion, oscillations, Lagrangian and Hamiltonian equations.

Prerequisites: PHYS 132 or PHYS 122, or permission of instructor.

PHYS 340
ELECTROMAGNETISM
Fall/Spring, 3 credit hour(s)

This course is an intermediate level presentation of the physics of the electromagnetic field. The course will explore the applications of electromagnetism in medicine (magnetic resonance imaging), and the interdependencies between electric and magnetic fields which are the essence of the theories of circuits, lines, antennas and guided waves. Topics include Electric and magnetic fields using vector methods, Gauss's law, theory of dielectrics, Ampere's law, Faraday's law, vector potential, displacement current, Maxwell's equations, wave propagation in dielectrics and conductors, and production and propagation of radiation.

Prerequisites: PHYS 132 or PHYS 122, MATH 162, or permission of instructor.

PHYS 410
SOLID STATE SCIENCE
Fall/Spring, 3 credit hour(s)

This course explores how the diverse properties (mechanical, electronic, optical and magnetic) of solid materials can be related to interactions at the atomistic level. Topics include crystal structures; bonding in solids; x-ray, neutron, and electron diffraction in crystals; lattice vibrations; energy bands in solids; the free-electron model; semiconductor and semiconductor devices.

Prerequisites: PHYS 202 or permission of instructor.

PHYS 420
INTRODUCTION TO QUANTUM MECHANICS
Fall, 3 credit hour(s)

This course is a senior-level introduction to the theory and formalism of non-relativistic quantum mechanics and its applications. This course provides the background with which to understand and meet the challenge of new applications of quantum mechanics. Principles of quantum mechanics and some mathematical techniques of solving quantum mechanical problems are examined.

Prerequisites: PHYS 132 or PHYS 122; MATH 162, or permission of instructor.

POLS 101
INTRODUCTION TO POLITICAL SCIENCE
Fall/Spring, 3 credit hour(s), GER 3

This course introduces students to the study of politics and government and examines the impact of politics in our lives. Students learn about the fundamentals of political theory and American government, examine the differences between forms of government and politics around the world, and analyze the relations between countries in the international community. Students consider contemporary issues of civil and human rights, political violence, globalization, and the workings of democracy in light of the theories and systems presented throughout the semester.

POLS 105
INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS
Fall/Spring, 3 credit hour(s)

This course examines the fundamental components of American government and politics, including political culture, interest representation, political participation, government institutions, and government policymaking. Students develop a

Course Descriptions: Psychology

basic knowledge of American politics and the tools for careful and critical evaluation of current events and political phenomena. Through the framework of the Constitution, this course examines governmental and political issues from the founding until now, including federalism, civil liberties and rights, political processes such as campaigns and elections, and the checks and balances between branches of government.

Prerequisites: POLS 101

PSYC 101 INTRODUCTORY PSYCHOLOGY *Fall/Spring, 3 credit hour(s), GER 3*

In this course, students are given an introduction to the scientific analysis of behavior. Attention is given to the historical background of present-day psychology, scientific methodology, the physiological basis of behavior, perception, learning, motivation, emotion, personality and the analysis and measurement of individual difference.

PSYC 220 CHILD DEVELOPMENT *Fall/Spring, 3 credit hour(s)*

In this course, students will explore the growth and development of the child from conception to adolescence. A variety of major theories and research will be covered to give an overview of the changes that occur in areas such as cognition, personality, social relationships, family, behavior, physical development, and sociocultural factors throughout the life of the child. Applications to parenting, teaching, and current societal trends will be discussed. Students may receive credit for either PSYC 220 OR PSYC 225, but not both.

Prerequisites: PSYC 101

PSYC 225 HUMAN DEVELOPMENT *Fall/Spring, 3 credit hour(s)*

In this course, students will explore lifespan developmental psychology: the quantitative and qualitative ways in which people change over time from conception through death. The course prepares students to grow in their ability to describe, explain, predict, and intervene in human behavior as demanded in the helping professions, and, in their lives as family members and citizens of the wider community. This course is an alternate to Child Development (PSYC220). Students cannot receive credit for both.

Prerequisites: PSYC 101 or permission of instructor.

PSYC 275 ABNORMAL PSYCHOLOGY *Fall/Spring, 3 credit hour(s)*

In this course, students will learn about psychopathology: the scientific study of the inability of people to behave in ways that foster their own well-being and the well-being of the greater society. The course examines psychological disorders – their symptoms, causes, and treatments – from multiple theoretical perspectives. Strengths and weaknesses in psychological assessment, the psychiatric diagnostic system, and mental health practices are explored.

Prerequisites: PSYC 101 or PSYC 111 or permission of instructor.

PSYC 295 PEER SUPPORT FOR OLDER ADULTS *Fall/Spring, 1 credit hour(s)*

In this course, students will explore the core knowledge and skills needed to provide peer support to older adults, including: promoting health aging, foundations in aging, recognizing ageism, aging experiences, motivational approaches and personal growth, and how to create and join a learning collaborative. This course is designed to develop and support individuals interested in becoming peer staff for support agencies.

PSYC 296 PEER SUPPORT FOR HEALTH AND WELLNESS *Fall/Spring, 1 credit hour(s)*

In this course, students will explore the core knowledge and skills needed to provide peer support to improve quality of life and promote holistic wellness, including: health and wellness, health communication, health literacy basics, characteristics, competencies, and resources that impact health and wellness, the peer role in health and wellness, and how to create and join a learning collaborative for health and wellness promotion. This course is designed to develop and support individuals interested in becoming peer staff for support agencies.

PSYC 300 CULTURAL PSYCHOLOGY *Fall/Spring, 3 credit hour(s)*

In this course, students will examine psychological concepts, theory, and research on variations and commonalities in human behavior, both within and across cultures. As a means of exploring the extent to which culture influences psychological phenomena, students will examine their own and different cultural practices and behaviors from around the world, and critically evaluate psychological topics from a cross-cultural perspective. Topics may include, but are not limited to: individualism and collectivism, perspectives on the self, culture and development, acculturation, among others.

Prerequisites: PSYC 101 and 45 credits

PSYC 308 PERSONALITY AND INDIVIDUAL DIFFERENCES *Fall/Spring, 3 credit hour(s)*

Introduction to the diverse ways of conceptualizing, assessing, and studying personality. Personality psychology is the scientific study of individual differences in characteristic patterns of thinking, feeling, and behaving. Students will learn about different approaches to the study, assessment, and application of personality and individual differences, including psychoanalytic, trait, humanistic, biological, cognitive, behavioral/social learning, and cultural, among others.

Prerequisites: PSYC 101 or permission of instructor

PSYC 310 COUNSELING THEORIES & PRACTICE *Fall/Spring, 3 credit hour(s)*

In this course students will learn of the major theories of psychological counseling, common issues, and principles in the practice of the helping professions. A critical presentation of the theoretical models will focus on the concepts, principles, techniques, goals, and contributions of each approach to counseling. The uses and limitations of each theory

will be discussed. Issues related to the helping professions will include standards of professionalism, ethics, and legalities.

Prerequisites: Minimum of 9 credits of psychology with a “C” or better average, including Introductory Psychology (PSYC 101), Abnormal Psychology (PSYC 275), Child Development (PSYC 220) or Human Development (PSYC 225), or permission of the instructor.

PSYC 315 CRISIS INTERVENTION *Spring, 3 credit hour(s)*

Introduction to the most common types of crisis events arising in settings such the hospital emergency room, community mental health center, community hotline, correctional facilities, and police services. The course provides knowledge of the major assessment methods and models of intervention appropriate to the setting. There is also an emphasis on special groups, including the development and treatment of crises with: children and adolescents, college students, victims of violence, victims of disaster or terrorism, and others. Vicarious trauma experienced by caregivers is discussed. Students will learn through case studies, readings, group activities and role-play experiences.

Prerequisites: PSYC 101

PSYC 316 UNDERSTANDING TRAUMA *Fall/Spring, 3 credit hour(s)*

In this course, students will be introduced to trauma, types of trauma, and how an individual can overcome and heal from traumatic events. The course will provide foundational knowledge of the biological, social, cultural, psychological, and developmental impact of trauma. Trauma informed assessment and care and its application in the health care field and educational settings will be examined. Students will gain an understanding of psychological disorders that may manifest from the experience of trauma.

Prerequisites: PSYC 100, PSYC 275

PSYC 320 HEALTH PSYCHOLOGY *Fall, 3 credit hour(s)*

In this course, students will examine the theories, research, and practice of health psychology. Students will explore the role of social determinants of health and wellness; the application of social and psychological factors to understand health promotion and prevention; and the interaction of psychological and biological factors through various topics including stress and coping, the placebo effect, chronic illness, and pain. Students will investigate how health-related theory and research can be applied for the benefit of both personal behavior change, and the health of communities.

Prerequisites: PSYC 101 and 60 credits or permission of instructor.

PSYC 340 SOCIAL PSYCHOLOGY *Fall/Spring, 3 credit hour(s), Online*

In this course, students undertake a scientific examination of how thoughts, feelings, and behaviors are influenced by the perceived or real presence of other people (i.e., individual behavior and thought in social situations). Core areas of examination include social cognition (e.g., heuristics, schemata, and affect), social perception (e.g., emotion, attribu-

Course Descriptions: Psychology, Sociology

tion, and impression formation), social influence (e.g., conformity, compliance, obedience, and prosocial behavior), attitudes (including prejudice, discrimination, and stereotypes), and the self (e.g., self-concept, social comparison, and stereotype threat).

Prerequisites: Introduction to Psychology (PSYC 101) or Introduction to Sociology (SOCI 101) or Introduction to the Science and Technology of Behavior (SSCI 245), junior level status, or permission of instructor.

PSYC 350 **EDUCATIONAL PSYCHOLOGY** *Fall/Spring, 3 credit hour(s)*

In this course students will study human behavior in educational settings: the application of child and adolescent development and learning principles; including use of tests and measurements, motivation, exceptional learners, classroom and behavior management, cognitive strategies, and introduction to the concept of "expert" teacher and student.

Prerequisites: PSYC 220 or PSYC 225.

PSYC 406 **WORKPLACE PSYCHOLOGY** *Fall/Spring, 3 credit hour(s)*

In this course, students will explore the intersection of the workplace and psychology. Students can expect to apply theory and principles to solve real life work issues. Topics include employee selection, performance & training evaluation, group dynamics, employee motivation & commitment, employee selection, leadership, organizational culture & development, and stress management.

PSYC 410 **COUNSELING SKILLS AND PROCESS** *Fall/Spring, 3 credit hour(s)*

An examination and practice of the skills, techniques, and process of counseling for students entering one of the helping professions. Specific techniques will be described, demonstrated and practiced. The stages of the counseling process and the goals and methods of each stage will be discussed and practiced.

Prerequisites: HUSV 315 or permission of instructor.

PSYC 421 **HONORS THESIS** *Fall/Spring, 3 credit hour(s)*

Students will complete an honors thesis based on their area of interest in Applied Psychology. Under the guidance of a faculty mentor, the student will submit a research proposal, conduct research, prepare a thesis style report, and present a defense to a thesis committee.

Prerequisites: HUSV 420.

SOCI 101 **INTRODUCTION TO SOCIOLOGY** *Fall/Spring, 3 credit hour(s)*

This course is an introduction into the Sociological study of society by exploring fundamental social theories and research methods used by sociologists to examine the interactions between social structures and individuals. The goal of the course is to gain a basic knowledge of sociological concepts and techniques, with a focus on the cultivation of the sociological imagination. This course will examine concepts such as culture, social structures and institutions, social processes of socialization,

stratification, and change, deviance, race, ethnicity, and gender.

SOCI 105 **AMERICAN SOCIAL PROBLEMS** *Fall/Spring, 3 credit hour(s)*

In this course, students will explore the social, economic, and ideological basis of social problems in American society. This course is grounded in a sociological approach, applying different theoretical perspectives and research methods to identify and understand contemporary social problems. Students will examine problems as they relate to social inequality, identity, wellbeing, and institutions.

Students will engage material to understand the extent of each problem, how these problems arise in society, and consider possible solutions. The relationship between social problems and organizational policies will also be discussed, particularly in regard to social policy approaches. Global contexts are incorporated when international comparisons offer solutions for consideration.

SOCI 205 **SOCIAL DEVIANCE & CONTROL** *Fall/Spring, 3 credit hour(s)*

An introduction to the ideological and theoretical foundation of Social Deviance and Social Control. Attention is given to micro/macro forms of deviance including the gamut from individual forms of deviance to state organized deviance. The course will examine the complex nature and the role agents of social control play in creating and enforcing norms and deviant labels. The course will examine a range of empirical data that attempt to explain the existence and occurrence of deviance.

Prerequisites: Introduction to Sociology (SOCI 101) or permission of instructor.

SOCI 210 **SOCIOLOGY OF THE FAMILY** *Fall/Spring, 3 credit hour(s)*

The study of family as a key social unit with the emphasis on structure, functions, problems and future of the institution. Cross-cultural comparisons, the relationship between the family and other institutions, and family-related policies also will be discussed. Three hours lecture per week.

Prerequisites: Introduction to Sociology (SOCI 101) or permission of instructor.

SOCI 250 **SOCIOLOGY OF MASS MEDIA** *Fall/Spring, 3 credit hour(s)*

The course will begin by exploring the component and the basic concepts of mass media. Special emphasis is on the social construction power of the mass media. The positive role of the mass media will be explored as well as the negative impact. The social control function of the mass media will be explained. The course is aimed at providing a critical assessment of the social construction power of the mass media with an emphasis on images, content and context as presented in the mass media. The course will explore the images of various segments of American society as presented in the mass media including racial/ethnic groups, gender and sexual orientation, age and class.

Prerequisites: Introduction to Sociology (SOCI 101) or permission of instructor.

SOCI 300 **RACE AND ETHNIC RELATIONS: AMERICAN AND GLOBAL PERSPECTIVES** *Fall/Spring, 3 credit hour(s)*

In this course students will examine and assess racial and ethnic relations. Students will be exposed to theories and research that explores the nature of ethnic stratification, incorporation, exclusion, and identity. Focusing on the United States; the course will survey key institutions and identify issues that reflect on inclusion/exclusion/identity. In addition, the course will briefly explore critical issues in racial and ethnic relations from a global context.

Prerequisites: SOCI 101.

SOCI 305 **GENDER IN THE MEDIA** *Fall/Spring, 3 credit hour(s)*

The course will begin by reviewing the components and the basic concepts of mass media. The course will focus on the power of social construction of the mass media in creating appropriate images of masculinity and femininity including sexual orientation. The course will survey the various theoretical traditions coming from sociology, psychology and gender studies exploring gender dynamics as portrayed in the media. The course will examine research exploring the impact and the ideological consequences of the power of the mass media within the arena of gender dynamics.

Prerequisites: SOCI 101 or permission of instructor and junior level status with a GPA 2.00.

SOCI 308 **SOCIOLOGY OF FOOD** *Fall/Spring, 3 credit hour(s)*

This course explores the significant relationships between people, culture, and food across societies. From the family dinner table to debates surrounding environmental impacts, the production, distribution, and consumption of food reflects social institutions, agricultural systems, politics, and identity. The emergence of food and eating as a sociological subtopic provides a platform for investigating areas such as: social problems, inequality and stratification, power, media, family, labor and work, health, nutrition and safety, ecology, and globalization.

Prerequisites: ENGL 101.

SOCI 312 **ADVOCACY, ACTIVISM AND SOCIAL CHANGE** *Fall/Spring, 3 credit hour(s)*

In this course, students will develop an understanding of both national and international social movements while engaging in advocacy and activism. This course is grounded in an applied sociological approach, exploring strategies and mechanisms for facilitating social change and participating in social justice action. Students will examine the historical and theoretical foundations of social change, particularly as related to identities involving race, class, and gender. This course will present the relationship between society, social institutions, and advocacy work, with opportunities for students to develop practical skillsets in campaigning.

Prerequisites: None - Co-requisite: SOCI 101

SOCI 313 **WOMEN AND AGING** *Fall/Spring, 3 credit hour(s)*

In this course students will explore the impact of aging on women, with special emphasis on the

Course Descriptions: Sociology, School of Engineering Technology

diverse experiences, challenges, and social and economic conditions of older women. Topics include the social construction of older women; historical and theoretical perspectives on midlife and older women; relationships with family and friends; racial, ethnic, and demographic issues; spirituality; economic issues; and living arrangements and care giving.

Prerequisites: SOCI 101

SOCI 320 SOCIOLOGY OF HEALTH, ILLNESS AND HEALTH CARE

Fall/Spring, 3 credit hour(s)

Using the sociological perspective, this course explores how social factors such as age, gender, social class and race / ethnicity influence personal experiences of health, illness, and health care utilization. This course challenges assumptions about health, illness and health care. Topics include the social construction of illness and health, a critique of the 'sick role', the meaning and experience of disability, chronic pain and chronic illness, an exploration of health care systems in the developed and developing worlds, and the challenges and opportunities facing both consumers and providers of health care in the 21st century.

Prerequisites: Junior level status; SOCI 101 or HLTH 104 or permission of instructor.

SOCI 325 SOCIOLOGY OF DISASTER

Fall/Spring, 3 credit hour(s)

The foundational premise of this course is that disasters are social in nature; revealing, or exacerbating, existing social inequalities. Analyzing a series of case studies using methodology from classical and contemporary sociology this course prepares students to better understand, plan for, and respond to disasters. The course uses a problem-based learning model in which students work in small groups to help a particular community prepare for a particular hazard.

SOCI 330 SOCIOLOGY OF GENDERED LIVES

Fall/Spring, 3 credit hour(s)

In this course students will study social changes in gender relations, gender inequalities and the social construction of gender. Using sociological theories different social institutions and spheres of society will be analyzed. Topics will include creation of gender differentiation, power, privilege, gendered performances, masculinities, femininities, sexualities, social inequalities and subordination. We will also look at social movements concerned with gender.

Prerequisites: SOCI 101

SOCI 360 SUSTAINABLE DEVELOPMENT

Fall, 3 credit hour(s)

Defined as "development that meets the needs of current generations without diminishing the possibility of future generations to meet their own needs", sustainable development has become a ubiquitous yet controversial catch phrase employed by the World Bank, the IMF, the United Nations and other international development agencies. Critics claim the term is merely a cover for continued neo-colonialism while its proponents argue that it allows space for a genuine consideration of the environmental and social good in policies aiming for economic growth.

This course develops students' capacity to understand these competing claims and develop their own definition of what sustainable development should look like internationally and domestically.

SOCI 361 SUSTAINABLE DEVELOPMENT IN CENTRAL AMERICA LAB

Winterterm - Study Abroad, 1 credit hour(s)

This study abroad experience investigates development in Central America and the degree to which communities can navigate the social structures (historical, economic, cultural etc.) and build a healthier, more equitable, environmentally sustainable and economically secure future. This two-week experience is set in two countries, Panama, and Costa Rica, who, as neighbors, share a language and some history but have distinct stories in terms of development. The two-country model allows students to more fully grasp the variety of challenges and opportunities that countries throughout Central and Latin America and develop research questions of their own.

Prerequisites: SOCI 360 or SSCI 271

SOET 101 INTRO TO COMPUTER USAGE FOR TECHNICIANS

Fall/Spring, 1 credit hour(s)

This course introduces students to the Windows Operating environment including creating and manipulating files and folders. Topics pertaining to word processor, spreadsheet and presentation software are introduced with laboratory assignments and instruction.

SOET 115 COMPUTER AIDED DRAFTING AND DESIGN 1

Fall/Spring, 3 credit hour(s)

This course introduces the student to the use of a computer to produce Mechanical engineering, Architectural, MEP and construction drawings. Students shall learn fundamentals functions of 2D AutoCAD software. Other topics covered in the course include Orthographic Projection, National Drafting Standards and Conventions, Detail Drawings, Assembly Drawings, Architectural, Constructions, Electrical, PLMG/HVAC and Civil CADD topics. 3D solid modeling and Building Information Modeling (BIM) are briefly explored at the end of this course. This course introduces 2D drawing topics in lecture as well as lab, with drafting and other related topics covered in lecture. This course cannot be taken for credit by students with credit in SOET 116.

SOET 116 INTRO TO COMPUTER AIDED DRAFTING AND DESIGN

Fall, 2 credit hour(s)

This course introduces the student to the use of a computer to produce engineering drawings. Students shall learn fundamental functions of autoCAD software (most current version). Other topics covered in the course include Orthographic Projection, National Drafting Standards and Conventions, detail Drawings, Assembly Drawings, Architectural, Constructions, Electrical, PLMG/HVAC and Civil CADD topics. Two laboratory hours per week.

SOET 250 INTRO TO 3D CAD AND BIM

Fall, 2 credit hour(s)

This course introduces students to commercial construction drawings using object based Computer Aided Design (CAD/REVIT) software used by engineers, architects and designers also known as Building information Modeling (BIM). Produce plans, sections elevations, 3D models, quantities, and other data which are fully coordinated and can be readily manipulated, accessed and shared. In addition BIM allows students to perform design tasks, query quantities and takeoffs, and generate drawing sheets for construction documentation needs.

SOET 314 ADVANCED CADD

Spring, 3 credit hour(s)

Students learn advanced methods, tools, and applications of 2D AutoCAD software. Students learn to use external references (XREFS) in CADD project files. Other topics include: learning to use attributes and dynamic blocks, scaling objects, using annotative tools and view ports, and alternate formatting. Students create civil, architectural and MEP type drawings using advanced CADD tools and industry concepts. A higher level of communication in CADD is emphasized with utilization of advanced tools to maintain control of and standardize CADD files for a commercial project. Projects mimic real world expectations of a professional CADD designer.

Prerequisites: SOET 116 or SOET 114; or permission of the instructor.

SOET 348 ENGINEERING SAFETY

Spring, 1 credit hour(s)

This course covers topics such as: The basic hazards and preventative measures from falls, mechanical injuries, heat and temperature, pressure, electricity, fires, explosions, toxic materials, radiation, vibration, noise, and computer safety.

Prerequisites: Student should be in his/her second year, or permission of instructor.

SOET 349 INDUSTRIAL SAFETY AND HEALTH

Fall, 3 credit hour(s)

This course explores provides the student with the key issues on engineering safety and health in workplace environments. Topics covered include historical perspective, laws and regulations, the human element, hazard assessment, prevention, control and management of safety and health.

Prerequisites: Junior level status or permission of instructor.

SOET 352 ADVANCED REVIT AND BUILDING INFORMATION MODELING (BIM) MANAGEMENT

Fall, 3 credit hour(s)

Building Information Modeling (BIM) generates and manages all components of a building's life cycle. BIM is a new industry standard, knowledge and efficiency which is highly sought after by employers. Students expand upon their knowledge of how the software works to learn about how it is used as a management tool. Students learn how to coordinate, update, and share design data with team members throughout the design and construction phases of a building project. Specifically,

Course Descriptions: SOET, Spanish, Sports Management

students learn how to set up office standards with templates that include annotation styles, preset views, sheets, and schedules; create custom element types and families, and establish a Company/Firm BIM foundation. This course prepares students for certification exams associated with Autodesk Revit certification.

Prerequisites: Student should be in his/her second year, or permission of instructor.

SOET 353 ADVANCED BUILDING INFORMATION MODEL (BIM) 2

Fall, 3 credit hour(s)

Students learn how to use BIM as a catalyst to improve collaboration, enhance shared ownership of project goals, and drive synergies between the project plan, design strategy and BIM strategy, thereby increasing the level of engagement in project teams. This course covers 3D (visualisation/clash detection), 4D (Time Simulation/Virtual construction/construction sequencing), 5D Estimating/cost simulation, 6d Sustainability and Energy analysis, 7D (Life cycle/Maintenance/Facilities management) components of BIM.

Prerequisites: SOET 352 or permission of the instructor.

SOET 373 MANAGEMENT TELECOMMUNICATIONS

Spring/Fall, 3 credit hour(s)

This course provides the student with opportunity to learn both voice and data communications, why companies and corporations feel that telecommunications is vitally important as well as how the regulatory environment affects the telecommunications industry. The technology is explained in an easy to understand, yet thorough, manner. Current and emerging technologies, the International Organization for Standardization, how telecommunications works, designed, and managed are covered. The student will learn why it is necessary to manage telecommunications, the functions of the telecommunications department, issues that telecommunications managers will be dealing with, and many real-world case studies.

Prerequisites: Junior level status or permission of instructor.

SOET 374 INDUSTRIAL MANAGEMENT

Fall/Spring, 3 credit hour(s)

Industrial management is a multi-disciplinary field that focuses on managing all aspects of an organization's operations. Topics covered include operations and productivity, operations strategy in a global environment, project management, forecasting, design of goods and services, sustainability in the supply chain, managing quality, statistical process control, process strategy, capacity and constraint management, location strategies, and layout strategies.

Prerequisites: MATH 121 College Algebra or MATH 123 Pre-Calculus, and MATH 141 Statistics, or permission of instructor.

SOET 377 ENGINEERING ETHICS

Fall, 1 credit hour(s)

This course extends the student's analytical skillset to include moral deliberation.

Topics covered include engineering code of ethics, responsibility in engineering, the social and

value dimensions of technology, trust and reliability, engineers in organizations, engineers and environment, international engineering professionalism, global issues, respect for diversity, and cases studies.

Prerequisites: Junior level status or permission of instructor.

SOET 378 ETHICS FOR ENGINEERS

Fall/Spring, 3 credit hour(s)

This course extends the student analytical skills to moral deliberation. Topics covered include engineering code of ethics, responsibility in engineering, the social and value dimensions of technology, trust and reliability, engineers in organizations, engineers and environment, international engineering professionalism, global issues, respect for diversity, case studies analysis, and research term paper.

Prerequisites: Junior level status or permission of instructor

SOET 400 TECHNICAL COMMUNICATIONS

Fall, 3 credit hour(s)

This course reinforces and improves students technical communication skills through writing, oral, and graphical communication. Students review concepts of proper sentence and paragraph structure and organization. Technical report writing reinforces proper verb tense, word choice, and writing style for a number of technical writing systems (e.g. full technical reports, letters, memos, fact-sheets). Students review program related technical literature to learn about proper use and referencing of technical, peer-reviewed literature. Editing and review skills are developed. Students conduct technical literature reviews of program related material, learn to synthesize the content, and present it in an oral presentation. Oral presentations are made using PowerPoint and by creating technical posters. These presentations also improve the student's graphical communication skills.

Prerequisites: ENGL 101 and 45 earned credits, or permission of instructor

SOET 410 ENGINEERING TECHNOLOGY SEMINAR

Spring, 3 credit hour(s)

This seminar course provides a forum in which students will present project/internship proposals and results to peers and faculty. Practicing professionals will additionally give presentations on current engineering technology issues facing students upon graduation. This course will serve all students in the Canino School

of Engineering Technology's baccalaureate programs requiring a project or internship and will expose each to the diversity of programs in the School. Three hours lecture per week.

Prerequisites: Enrolled in the culminating experience course for major program of study, or permission of instructor.

SOET 477 CAPSTONE PROJECT

Fall/Spring, 3 credit hour(s)

This course provides a learning experience that allows students to propose, design and implement a project. This could be a study of a problem and solution of specific equipment, new product design, improvement of an existing product and many others. All projects must be approved by course faculty. Three hours of lecture per week. Pre-requisites:

Senior level status or permission of program director.

Prerequisites: Completion of seven semester coursework (senior level status) or permission of program director.

SOET 480 FE EXAM REVIEW

Spring, 0 credit hour(s)

This course is a review of the necessary knowledge to pass the Fundamentals of Engineering exam.

Prerequisites: Senior status

SPAN 101 CONTEMPORARY SPANISH I

Fall/Spring, 4 credit hour(s), GER 9

This course will introduce the student to the sound system and grammatical structure of the Spanish language. The focus will be on developing and increasing skill levels in the areas of aural comprehension, speaking, reading, and writing. At the end of one semester, the student will have a basic understanding of grammar, including word formation, verb conjugations, idiomatic expressions, and will recognize cognates. This course will also discuss various cultural aspects of the Spanish-speaking world. Three hours lecture, one hour laboratory per week. This course is only for the true beginner or for a student who has had less than two years of high school Spanish.

SPAN 102 CONTEMPORARY SPANISH II

Fall/Spring, 4 credit hour(s), GER 9

This course will build upon the grammatical structure of the Spanish language learned in first semester Spanish. The focus will be on developing and increasing skill levels in the areas of aural comprehension, speaking, reading

and writing. The student will learn to describe situations in the present, past and future tenses. At the end of the semester, the student will have an intermediate understanding of grammar, including word formation, complex verb conjugations, and idiomatic expressions. This course will also discuss various cultural aspects of the Spanish-speaking world. Students must have passed Spanish 101 (first semester Spanish), or have had at least three years of high school Spanish to enroll in this class. Speakers of Spanish may enroll in this course with the permission of the instructor.

Prerequisites: Contemporary Spanish I (SPAN 101) or have had at least three years of high school Spanish. Speakers of Spanish may enroll in this course with the permission of the instructor.

SPCH 104 INTRODUCTION TO SPEECH

Spring, 3 credit hour(s)

This course is an introduction to the principles of Effective Speech Communication. It includes techniques of audience analysis, establishing credibility as a speaker, planning, organizing and researching material, and delivery and use of audio visual aids. Both informative and persuasive speaking are covered. Three hours lecture per week.

SPMT 100 SPORTS MANAGEMENT MAJOR PREP

Fall, 1 credit hour(s)

A requirement for all sports management students, this course is designed to help prepare sports management students for success in the major, as well as, college as a whole. The course will intro-

Course Descriptions: Sports Management, Social Science

duce students to critical reading, critical thinking and academic writing and the expectations of each throughout the program. In addition, topics such as college success strategies, learning/study techniques and available resources will be covered.

SPMT 101 FOUNDATIONS OF SPORTS MANAGEMENT

Fall/Spring, 3 credit hour(s)

This course is designed to provide students with an overview of sports management issues, trends, and career opportunities. The course will examine marketing, financial, ethical, and legal management principles and apply those principles to amateur, professional and lifestyle sport settings.

Prerequisites: Introduction to Business (BSAD 100) or permission of instructor

SPMT 202 SPORT IN SOCIETY

Fall/Spring, 3 credit hour(s)

This course examines sports using the sociological perspective. The course will focus on current and past issues within the sociology of the sporting landscape. Students will utilize critical thinking skills, past research and theories to examine the role of sports as a key social institution that influences and is influenced by the larger society.

SPMT 203 LEADERSHIP FOR SPORTS PROFESSIONALS

Fall, 3 credit hour(s)

This course will first introduce students to theories, approaches, and styles of leadership, as well as, the role that ethics and ethical decision making play in shaping leader behavior. Students will analyze leadership practices within different sport settings. Case studies of sport leaders from multiple sport levels and structures will be used to examine best practices in sport leadership. Critical issues in sport leadership such as gender and ethnicity will be examined as well. Students will also begin to explore their own leadership thoughts and tendencies and emphasis will be placed on the promotion of personal leadership development with a focus towards successful sport leadership.

Prerequisites: Foundations of Sport Management (SPMT 101) or permission of instructor

SPMT 240 SPORTS GOVERNANCE

Fall/Spring, 3 credit hour(s)

This course is an examination of governance structures within professional and amateur sport organizations. Students will explore policy elements and issues within scholastic, amateur, campus recreation, intercollegiate athletics, professional sport (North American and International), and Olympic sport. This course will examine the mission, structure and function of sport governing bodies such as the NCAA and NAIA in Intercollegiate Athletics, Players Associations in Professional Sports, and the IOC, NOC's and OGOC's in Olympic sport.

Prerequisites: Foundations of Sport Management (SPMT 101) or Introduction to eSports Management (ESPT 100), OR permission in instructor

SPMT 241 LEGAL ISSUES IN SPORT

Fall/Spring, 3 credit hour(s)

This course is designed to introduce students

to legal applications within the sport industry. Through the use of case studies, this course provides an in-depth look at amateur and professional sports legal issues, such as; due process, anti-trust, free speech, duty of care, care owed to athletes and spectators, injuries, assumption of risk, contributory negligence, Title IX, contracts, tort law, and the growing instance of violent acts at or as a result of sporting events.

Prerequisites: Business Law I (BSAD 201) or permission of instructor.

SPMT 242 SPORTS FINANCE

Fall/Spring, 3 credit hour(s)

This course deals with the importance of finance and accounting theory within the sport industry. Students will explore elements that influence the financial world then apply such elements to the specific sport business world. Revenue and expense categories for professional and collegiate sports teams will be differentiated and evaluated in terms of league policies and current economic conditions. From case studies, this course will examine business structure, sources of capital and financial management in the unique business environment of professional and college sports.

Prerequisites: SPMT 101 Foundations of Sports Management or permission of instructor.

SPMT 244 PHILOSOPHY, PRINCIPLES, AND ORGANIZATION OF ATHLETICS IN EDUCATION

Fall, 3 credit hour(s)

This NYSED mandated course will provide an overview of NYSED and NYSPHSAA coaching certification process and requirements. This course is the first course of a four-course micro credential sequence that leads to high school coaching certification. Students will become familiar with interscholastic athletics, the role of NYSPHSAA and organization philosophies, and history of NY state interscholastic athletics. In addition, students will learn about the National Federation of State High School Associations, Commissioner of Education Regulations and NYS Education Department regulations related to high school athletics. Students will learn the organizational structure of high school athletics along with coaching organization and management practices. Course also includes NYS mandated Child Abuse Prevention Workshop and SAVE Legislation training. Safety precautions and officiating methods are also covered.

SPMT 245 THEORIES & TECHNIQUES OF COACHING

Fall, 3 credit hour(s)

This seven-week course is part of the Interscholastic Coaching Micro-Credential and part of the NYSED required course for Interscholastic Coaching Certification. The course will provide an overview of leadership theories and approaches as they apply to sport coaching. The goal of the course is to provide potential coaches with a better understanding of best coaching practices and methods utilizing leadership principles to be effective coaches/leaders and create an environment for players and parents that is developmentally, physically, and psychologically nurturing.

NYSPHSAA coaching standards along with NASPE coaching standards will be reviewed. Note

: For NYSED certification, students must also complete a sport specific course through NFSH (National Federation of State High School Associations) for the sport they wish to be certified in. Students will be responsible for the course fee assigned to the specific course they enroll in. Enrollment and completion can be at the convenience of the student once they have successfully completed the course above. Course fee may range from 35.00-50.00 depending on the sport. Note : SUNY Canton Sports Management students will fulfill this micro credential requirement after successful completion of SPMT 203 which is required for their program. Students in the program do not need to take this course for certification. However, SUNY Canton sports management would still need to complete the sport specific course explained above and will be responsible for the course fee.

Prerequisites: SPMT 244

SPMT 246 HEALTH SCIENCES FOR COACHING

Spring, 3 credit hour(s)

This 15-week course is part of the Interscholastic Coaching Micro-Credential and part of the NYSED required course for Interscholastic Coaching Certification. This course will cover selected principles of biology, anatomy, physiology, and kinesiology as they relate to coaching. Emphasis placed on the mechanics, recognition, prevention, and proper care of athletic injuries including concussion management. Other risk management topics related to safety and health for coaches will also be discussed along with NYSED selection and classification of athletes; age and maturity of athletes. Note 1: For NYSED certification, students must also complete an approved Red Cross First Aid and CPR class. Course fee is the responsibility of the student. Note 2: For NYSED certification students must also enroll in successfully complete SPMT 244 and SPMT 245 offered in the fall semester. SUNY Canton sports management majors will need to successfully complete SPMT 244 and SPMT 203.

SPMT 254 SPORTS OFFICIATING

Spring, 3 credit hour(s)

This course is designed to provide students with training and practical experience in officiating sports and the knowledge and expertise necessary to officiate as an official with the New York State Public High School Athletic Association. The course is based on the best practices pertaining to the National Federation, RefRep. and the New York State Public High School Athletic Association. Students will learn the fundamentals of sports officiating to step on the field or court with confidence. This course engages learners in the fundamental definitions, rules, and mechanics of sports officiating needed to take the first step in becoming a NYS certified sports official. A portion of this course will use the RefReps Officiating Education System (learn.refreps.com) to deliver video-based interactive online modules on a Learning Management System created by RefReps. Each module is aligned with the corresponding sections of the NFHS Rulebook for the sport and includes downloadable resources which deepens the learner's understanding of the topic.

Course Descriptions: Sports Management

SPMT 300 **SPORTS MANAGEMENT PRACTICUM** *Fall/Spring, 1-3 credit hour(s)*

The Sports Management Practicum course offers students curriculum opportunities to engage in practicum experiences after their sophomore year for earned credit. The practicum course provides opportunity for a student to observe a working sports management professional perform his/her duties and allow students the opportunity to participate in a limited role in performing tasks under supervision of practicum supervisor. Students may earn a maximum of three upper level credits through the practicum course. The three credits may be earned in one semester or split between semesters. One credit of practicum is equal to 40 hours of supervised work. Practicum supervisors and students may never exceed the hour requirement for a practicum course enrolled for. Students must fulfill all expectations and requirements of the practicum course to pass.

Prerequisites: Junior Standing in the program, Minimum G.P.A. of 2.0, completion and acceptance of all practicum applications, forms, and contracts.

SPMT 306 **SPORTS OPERATIONS AND FACILITIES MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course examines the various techniques and strategies used in meeting the want and needs of consumers in the sports industry. The course examines the differences between sports marketing and traditional marketing. Students will learn about the importance of market research and segmentation in identifying the right sports consumers. Students will also learn how data-based marketing can be used to connect.

Prerequisites: BSAD 310, SPMT 203, BSAD 301 or permission of instructor.

SPMT 307 **SPORTS MARKETING** *Fall/Spring, 3 credit hour(s)*

This course examines the various techniques and strategies used in meeting the want and needs of consumers in the sports industry. The course examines the differences between sports marketing and traditional marketing. Students will learn about the importance of market research and segmentation in identifying the right sports consumer. Students will also learn how data-based marketing can be used to connect with sport consumers and the development of sponsorship and endorsement packages.

Prerequisites: Foundations of Financial Accounting (ACCT 101) and Expository Writing (ENGL 101), or junior level status, or permission of instructor.

SPMT 308 **SPORTS EVENT MANAGEMENT** *Fall/Spring, 3 credit hour(s)*

This course will focus on the fundamentals of sports events management at multiple levels – recreational, college, and professional. Components will include program planning, organization, budgeting, marketing, risk management, safety and security, staffing, conducting the event, promotional activities, and other factors associated with successful management of sport events. Students will be responsible for the management of at least one sport/recreation event on campus.

Prerequisites: Sports Operations and Facilities Management (SPMT 306) or permission of instructor.

SPMT 311 **SPORTS INFORMATION** *Fall/Spring, 3 credit hour(s)*

This course is designed to introduce students to the working elements of an effective sports information office in a college setting. Students learn the techniques and strategies used by sports information professionals for effective communication including writing, publications, web site design and management, digital sports photography, and social media. Students also are introduced to the various technologies and software widely used in sports information.

Prerequisites: (SPMT 101) Foundations of Sports Management, or permission of instructor.

SPMT 312 **SPORTS ENTREPRENEURSHIP** *Fall/Spring, 3 credit hour(s)*

This course evaluates the skills, attitude, and commitment necessary to successfully operate an entrepreneurial venture. Students assess their personal strengths and entrepreneurial capabilities as well as explore and identify opportunities for small business ventures within the sport marketplace. Students assemble the key components of a business plan and will learn to evaluate idea feasibility and financial requirements.

Prerequisites: BSAD 100, AND SPMT 101, SPMT 241, SPMT 307, OR ESPT 100 and BSAD 203; OR permission of instructor.

SPMT 313 **ECONOMICS OF SPORT** *Fall/Spring, 3 credit hour(s)*

This course utilizes economic theory to assess market outcomes in the professional and collegiate sport industry. Fan decisions to attend games will be evaluated according to economic principals such as scarcity and demand. Further, fan responsiveness to ticket prices will include price elasticity, marginal revenue and price discrimination considerations. Students will also assess sport media markets, management decision making, and league structure in terms of market outcomes. The impact of stadium subsidies on economic impact will also be reviewed. This course content will aid students in interpreting current events and sport management decision making through the application of economic principles.

Prerequisites: SPMT 242

SPMT 315 **INTERNATIONAL STUDY ABROAD** *Spring, 3 credit hour(s)*

This course provides students a short-term study abroad opportunity and will provide theoretical and professional insight and a first-hand experience in international sports. The course meets during the spring semester, and shortly the spring semester is complete, students travel to various cities in Europe while exploring the European Model of Sport. Students will attend lectures from European sport executives, conduct workshops, and tour sports facilities and attend sporting events.

Lectures will cover structure and characteristics of international sports, marketing, event and facility management, and international sports governance.

Prerequisites: 45 credit hours or permission of instructor

SPMT 320 **GLOBAL SPORT PERSPECTIVES** *Spring, 3 credit hour(s)*

Global sport study introduces students to structure and critical issues of the sport business environment from a global perspective. International sport governance, globalization of professional sport, international sports mega-events, and global media technology will be assessed to recognize trends and create sport management strategy. The impact of social changes and global market expansion will be demonstrated in a review sport culture, and commerce.

Prerequisites: Junior or senior standing in SPMT program or permission of instructor

SPMT 330 **PSYCHOLOGY OF SPORT AND EXERCISE** *Spring, 3 credit hour(s)*

In this course, students will explore the psychological variables that impact athletic participation and performance. Through the integration of cognitive, sociocultural, behavioral, and clinical research and practice, students will gain understanding of sport and exercise participants, different sport and exercise environments, group processes, and ways to improve performance, growth, and well-being of sport and exercise participants.

Prerequisites: PSYC 101 or SPMT 101

SPMT 410 **ORIENTATION TO CULMINATING EXPERIENCE IN SPORTS MANAGEMENT** *Fall/Spring, 1 credit hour(s)*

This course prepares the student for their internship or senior project in sport management. Students will learn the processes involved in selecting and securing an internship site along with the necessary skills and appropriate behavior necessary for a successful internship experience. Students will also learn how to prepare an appropriate resume and will prepare a resume to be used in the internship process. Students will also be introduced to interviewing techniques and tips and will apply such through a mock interview process. Alternatively, if the student chooses the senior project route, the course will provide them with the collaboration with their advisor and classmates that will create the foundation for, and plan of, what is to be accomplished in satisfaction of the requirements for completion of the senior project. This course is a prerequisite to Sports Management internship (SPMT 421) and Sports Management Senior Project (SPMT 422).

Prerequisites: Senior level status in SPMT and completion of required Sport Management courses through semester six, or permission of instructor

SPMT 411 **SPORTS PUBLIC RELATIONS** *Fall/Spring, 3 credit hour(s)*

This course focuses on the application of media relations, communications, sport marketing, and demographical concepts in a sport organization. Students will develop a sport public relations campaign that will utilize various broadcast, electronic, and print media. Students will learn how to generate and run focus groups, as well as generate media packets, press releases, and presentation of their public relations campaign.

Prerequisites: Sports Operations and Facility Management (SPMT 306), Sports Marketing (SPMT 307), Sports Event Management (SPMT 308), or permission of instructor

Course Descriptions: Sports Management, Social Sciences

SPMT 412 **SPORTS SALES AND SPONSORSHIPS** *Fall/Spring, 3 credit hour(s)*

In this course students will learn techniques and strategies for enhancing and expanding sport sales and sponsorships, as well as, related sport promotions strategies. Students will examine the sports sales process and compare the strengths and disadvantages of various selling strategies and methods. Sponsorship opportunities will be reviewed and students will learn key elements of sport sponsorship sales, implementation and evaluation.

Prerequisites: SPMT 307 Sports Marketing; OR ESPT 100 Introduction to eSports Management and 45 Credits earned; OR permission of instructor

SPMT 413 **CONTINUING ISSUES IN COLLEGE SPORTS ADMINISTRATION** *Fall, 3 credit hour(s)*

Senior Seminar Course. Using a seminar format, this course will study the enterprise of college athletics in the United States. Primary focus, discussion and research will center on current contemporary issues in college athletics including but not limited to NCAA policies, gender equity & Title IX, graduation rates, recruitment ethics, hazing, drug testing, pay for play, diversity in coaching, financial issues, student-athlete behavior, and academic reform and how these issues impact the function, management and leadership of intercollegiate athletic programs.

Prerequisites: Senior level status in SPMT or permission of instructor

SPMT 414 **LABOR RELATIONS IN SPORT** *Fall/Spring, 3 credit hour(s)*

This course examines labor markets in sport and the infrastructural interests of management (league and teams) and players (players associations, players, agents/attorneys). Students review collective bargaining agreements and evaluate the impact of salary caps, free agency and athlete compensation frameworks. This course examines athlete salaries and agent representation and the unique labor markets of Major League Baseball and the National Football League.

Prerequisites: Legal Issues in Sport (SPMT 304), Human Resource Management (BSAD 310), or permission of instructor

SPMT 415 **SPORTS MEDIA AND BROADCASTING** *Fall/Spring, 3 credit hour(s)*

This course examines different forms of sports media including print, broadcast, and internet and their impact on sports. Students learn the fundamentals of various components of sports media such as writing game and feature stories, writing strategies for broadcast, active voice, internet streaming, shooting on location, anchoring and play by play, and production of the various forms of sports media. Students examine economic, ethical, gender, and race issues in sports media. This experiential course offers students an opportunity to apply knowledge and skills to sports media activities using the college's athletic program and high school sports programs as their media focus.

Prerequisites: SPMT 411 or permission of instructor.

SPMT 421 **SPORTS MANAGEMENT INTERNSHIP** *Fall/Spring, 6-9 credit hour(s)*

The internship for sport management students provides a structured opportunity to apply theories, concepts, and skills learned in the classroom in a sport management/industry setting. The internship is individualized based on the career interests of the student and the specific needs of the organization.

Internship proposals are presented and approved prior to registration for the course.

Prerequisites: 1) SPMT 410 2) A combined G.P.A. of 3.0 in all SPMT courses completed (or permission of program director) 3) Completion and acceptance of SPMT Internship Application

SPMT 422 **SPORTS MANAGEMENT SENIOR PROJECT** *Spring/Fall, 3 credit hour(s)*

This course is an alternative to SPMT 421 for students unable to complete a 15-credit internship. Students complete a senior research project specifically addressing a critical issue in a sport management setting or germane to a sports profession. Under the guidance of a faculty mentor, the student submits a research proposal, conducts research, prepares a thesis style report, and presents a defense to a thesis committee. Length and depth of the project dependent upon credit value.

Prerequisites: SPMT 410 & SPMT senior standing or permission of instructor

SPMT 430 **ADVANCED SPORTS MARKETING & SALES** *Spring, 3 credit hour(s)*

This course focuses on identifying and evaluating social media and ticket sales strategies in professional and collegiate sport. Specifically students will learn ticket operation policies, customer relationship management methods, and social media marketing opportunities. Students will design a comprehensive sales and social media program for a selected sport organization and dynamically present his or her new value added strategy. An interview and sales call project will provide valuable insight into "front office" ticket sales season ticket holder retention, prospecting, and servicing accounts.

Prerequisites: BSAD 100, SPMT 101, SPMT 307, SPMT 308, SPMT 412

SPMT 431 **APPLIED SPORTS MEDIA AND BROADCASTING** *Fall/Spring, 3 credit hour(s)*

This experiential course builds on the fundamentals of sports media and broadcasting learned in SPMT 415 providing opportunity for the application of principles, best practices, theories and techniques of different sports media components. Working collaboratively, students will produce three sports shows throughout the semester based on topics assigned. Students will write and deliver copy, and work the various stations in the control room. Each student is also responsible for doing one Weekly Roo Review, which will focus on SUNY Canton athletics during a one week period. Students will also collaboratively do at least one live broadcast of an on-campus sporting event.

Prerequisites: SPMT 415 or permission of instructor.

SPMT 432 **APPLIED SPORTS EVENT MANAGEMENT** *Fall/Spring, 3-15 credit hour(s)*

This experiential course builds on the fundamentals of sports events management learned in SPMT 308 providing opportunity for the application of principles, best practices, and theories of successful event management. As a group, students are responsible for the total management of a major sporting event available to the public at large. Students have hands-on opportunity for all components of the event including planning, organization, budgeting, marketing, public relations, leading personnel, risk management planning, conducting the event and event assessment. Students are also required to work and/or shadow two major off-campus events and provide critical assessment of each. Students also apply principles and best practices to a series of case studies throughout the semester.

Prerequisites: Senior SPMT standing, Sports Event Management (SPMT 308) or permission of instructor.

SSCI 181 **ALCOHOL DRUGS & SOCIETY** *Fall/Spring, 3 credit hour(s)*

Students examine the various aspects of drug abuse and addiction including theories, models, individual drug classifications and social consequences. Additional topics include the impact on family systems, overview of treatment approaches, and public policy in the United States.

SSCI 221 **INTRODUCTION TO CHINESE HISTORY & CULTURE** *Fall/Spring, 3 credit hour(s)*

This course introduces students to the major aspects of Chinese history and culture. The first seven weeks of the semester are focused on the history of China before 1949, particularly the major Chinese dynasties together with coverage of the historical events, people as well as their significance and influence; the second seven weeks cover a variety of topics related to post-1949 China's political structure, economic reform, population policy and educational system, etc. The knowledge that the students have learned at the "history" stage enables them to have a deeper understanding of today's China.

SSCI 250 **EXPLORING DIVERSITY & FAITH** *Fall/Spring, 3 credit hour(s)*

This course provides the opportunity to explore diverse perspectives through the lens of religion and spirituality. Using a sociological theoretical framework to center our exploration, we will consider the ways in which religion shapes social identities, focusing on race and ethnicity, class, gender, and sexuality. We will examine the role that religious beliefs have in shaping relationships with power, privilege, oppression, and opportunity, both nationally and globally. Students will critically examine how faith traditions of both the ancient and modern world shape our shared reality.

SSCI 271 **CONTEMPORARY GLOBAL ISSUES** *Fall/Spring, 3 credit hour(s)*

In this course students are introduced to global politics and issues through the lens of globalization. Students examine how globalization relates to political systems, environmental issues, poverty,

Course Descriptions: Social Sciences, Technological Comm.

migration, human rights, terrorism, conflict, and the economy. The focus is on the interrelated nature of politics, society, and economics across the globe and on the shared future we forge.

SSCI 275 INTRODUCTION TO UKRAINE *Fall/Spring, 3 credit hour(s)*

Introduction to major aspects of the Ukrainian history and culture. Cultural topics related to family, religion, population demographics, government, arts, music, literature and education will be included. Contemporary life in Ukraine and the broad sweep of historical forces contributing to today's culture will be the focus of the course. The recent events in Ukraine will be discussed, such as the election of October-December 2004 and the "Orange Revolution." Ukraine gained its independence in 1991 and is fiercely proud of this independence from the Soviet Union.

SSCI 306 ANIMALS, PEOPLE, & SOCIETY *Fall/Spring, 3 credit hour(s)*

In this course students will critically explore the evolving relationship between humans and other animals. Applying an interdisciplinary framework, we will draw from scientific, philosophical, and cross-cultural approaches to engage topics from the field of Human Animal Studies.

Discussion will focus on animal-human borders, animal rights, our relationship with wildlife, the link between animals and human oppression, and modern human-animal collaborations. We will explore the complexity of animal roles in society, and the varied meanings assigned to them, as pets, partners, entertainment, therapeutic and rehabilitative assistants, spiritual symbols, test subjects, and livestock.

Students will have the opportunity to engage in discipline-specific research opportunities relating the significance of animals to their field, while also expanding their overall interdisciplinary knowledge.

SSCI 310 HELPING THE GRIEVING CHILD *Spring, 3 credit hour(s)*

Children are often the forgotten mourners. How does our society support grieving children and communicate with children about the sensitive topics of dying and death? This course will examine how adults, including parents, funeral directors, teachers, and health care professionals can talk to children about death and loss in general. This study of children's grief will include an examination of the developmental stages and children's reactions to death. Specific techniques, activities, and rituals designed to facilitate a child's grief will be explored and discussed.

Prerequisites: ENGL 101 and PSYC 101.

SSCI 315 DEATH, DYING, AND BEREAVEMENT *Fall/Spring, 3 credit hour(s)*

This course is designed to present ways in which social science views the human experience of death, dying, and bereavement. Drawing from Sociology and Psychology, this course introduces macro and micro level theories and associated concepts. Micro-level concepts and theories regarding the interaction patterns between dying patients and family, medical staff, and individuals involved are examined. Societal (or macro level) theories of social change, the needs of the dying, ethical considerations, biological,

social, and psychological factors in the lengthening of life, and the consequences of death, dying, and bereavement are discussed. Cross-cultural experiences with these phenomena are examined.

Prerequisites: PSYC 101 or SOCI 101 and 30 credit hours, or permission of instructor.

SSCI 320 GRANT DEVELOPMENT STRATEGIES *Fall/Spring, 3 credit hour(s)*

In this course, students will gain knowledge of the process and procedures for seeking grants. Types of projects that generally are funded and sources utilized to identify prospective funders will be explored. Students will gain an understanding of the essential components of a well written grant including a needs statement, clear goal and objectives related to a project, budget development, and an evaluation tool for measuring outcomes.

Prerequisites: ENGL 101 or permission of instructor.

SSCI 370 RESEARCH METHODS IN SOCIAL SCIENCE *Fall/Spring, 3 credit hour(s)*

In this course students will engage in a comprehensive study of the scientific research methods utilized in the social and health sciences. Students are trained to be critical consumers of published research. Topics covered include the scientific method; critically evaluating research; qualitative and quantitative research analysis; operationalization and measurement, sampling techniques, surveys, field research, secondary data analysis, experimental research, correlation; and data management, analysis, and interpretation.

Prerequisites: ENGL 101, MATH 141 and PSYC 101 or SOCI 101 or ECON 101 or ECON 103 or permission of instructor.

SSCI 401 DIVERSE PERSPECTIVES CAPSTONE *Fall/Spring, 1 credit hour(s)*

Understanding diverse perspectives is essential for navigating a globally connected world and multifaceted workforce. To fully engage in diverse social and professional settings, we must apply the knowledge of diversity, equity, and social justice. This course is offered as a mechanism for participants to develop a culminating project to enhance cultural awareness and foster understanding, tolerance, and a sense of community among persons with varied backgrounds. Emphasis is placed on historically marginalized and underserved groups. This course is also required to complete the Diverse Perspectives microcredential.

Prerequisites: Must be a Junior or Senior.

TCOM 100 INTRODUCTION TO TECHNOLOGICAL COMMUNICATIONS *Fall, 3 credit hour(s)*

This course offers students a first step into the study and practice of Technological Communications, the craft of getting their ideas across in the Digital Era. Students construct information architecture, writing, editing, user experience design, and instructional planning while gaining a working knowledge of a range of tools available to help them create and share their work. Students also start a portfolio of projects designed to explore the boundaries of communication in the 21st century.

TCOM 330 DIGITAL NARRATIVE WORKSHOP *Spring, 3 credit hour(s)*

This course is a writing intensive digital workshop where students hone the knowledge and skills they have developed in previous Technological Communications courses. As an advanced workshop this course is intended for students already producing solid work and is meant to provide a disciplined, creative environment where students focus on the craft of writing alongside technology. Students read and discuss notable digital writing projects while also providing constructive oral and written feedback on the projects of their peers in a workshop setting. Students produce multiple projects over the course of the semester which are revised and submitted into their professional portfolio. At the end of the course, students seek publication for their work.

Prerequisites: In Technological Communication Program and ENGL 221, or ENGL 315, or ENGL 350, or permission from the instructor.

TCOM 350 ELECTRONIC LITERATURE: FROM CYBERTEXT TO VIDEO GAMES *Spring, 3 credit hour(s)*

In this course students explore the practices and theories of screen-based literature by tracing the transformation of electronic literature from hypertext fiction to augmented reality stories to massive online games (MMOGs). The first half of the course is spent reading, interacting with, and assessing existing hypertext fiction and early indie computer games such as *Afternoon, A Story*. The second half of the course allows students to experience more immersive stories such as augmented reality documentaries, interactive fiction, hacktivist narrative games, and cooperative MMOGs. Students apply conceptual and aesthetic principles to build experimental stories and games in various platforms such as Twine, ARIS, Unity, and Siftr.

Prerequisites: ENGL 101.

TCOM 360 ONLINE MEDIA AND POP CULTURE *Spring, 3 credit hour(s)*

Students explore new forms of online media and their interaction with various types of popular culture, including television, news, literature, film, and politics. Platforms like Tumblr, Twitter, Facebook, and YouTube are discussed, as well as tools like podcasts, RSS feeds, and push notifications. Transformative works and implications for copyright law are also examined. Students learn online skills while analyzing the content of popular culture and its dissemination to the wider public.

TCOM 400 INTERNSHIP IN TECHNOLOGICAL COMMUNICATIONS I *Fall, 3 credit hour(s)*

Students develop technological communications skills in a professional environment. Students work closely in technological communications with an organization, building their portfolio and gaining important community experience. Students also attend a weekly seminar and provide regular updates of their progress.

Prerequisites: Senior status in TCOM program.

Course Descriptions: TCOM, Veterinary Tech.

TCOM 410 INTERNSHIP IN TECHNOLOGICAL COMMUNICATIONS II

Spring, 3 credit hour(s)

This course provides students with the opportunity to build on experiences in TCOM 400 and further develop practical communications skills in a real-world setting. Students work closely with an organization to assess its needs, and build a project designed to address these needs. Students also have a weekly seminar and provide regular updates of their progress.

Prerequisites: TCOM 400 Internship in TCOM I and Senior status in TCOM program

TCOM 420 SENIOR SEMINAR IN TECHNOLOGICAL COMMUNICATIONS

Spring, 3 credit hour(s)

This class offers students the opportunity to look towards their professional future as they synthesize their Technological Communications coursework by completing and enhancing their professional portfolio, designing, and constructing a semester-long capstone project, and completing preparations for career opportunities.

Prerequisites: Senior status in TCOM program

VAST 105 VETERINARY ASSISTING

Spring, 1 credit hour(s)

This course provides students with an understanding of the roles of all members of the veterinary health care team and the knowledge and skills necessary to assist veterinarians and veterinary technicians in the practice of their professions. It instructs students in proper basic care and husbandry of animals, as well as the monitoring of general animal health indicators. It emphasizes the proper handling and restraint of animals for examinations and medical procedures. Care of veterinary supplies, equipment, and facilities is also covered, with an emphasis on meticulous disinfection, sterilization, and infection control measures.

Prerequisites: Enrollment in the Health Science Career Studies Certificate and successful completion of Medical Terminology of Disease (HLTH 200) or permission of instructor.

VSAD 301 VETERINARY PRACTICE MANAGEMENT

Spring, 3 credit hour(s)

The purpose of this course is to provide the student with current information in veterinary practice management. Students will apply concepts, principles and skills they have learned in previous coursework to situations specific to veterinary practice management. Topics include: veterinary hospital human resource management, management of reception and front desk procedures, telecommunications and information technology management of veterinary practice, veterinary hospital revenue and financial control, management of veterinary medical records, veterinary inventory control, veterinary facilities management, and marketing a veterinary practice.

Prerequisites: Enrollment in or completion of a degree in a Veterinary or Business related program and at least 45 credits earned overall, or permission of instructor.

VSAD 302 ANIMAL CARE INSTITUTION MANAGEMENT

Fall, 3 credit hour(s)

This course instructs students in veterinary hospital design; veterinary equipment acquisition, training, maintenance, and replacement; insurance for veterinary facilities; and programs and services administered by veterinary technicians. The course also addresses the management of specific types of animal care facilities and institutions and how this may differ from that of the conventional companion animal practice. Facilities and organizations such as mobile clinics, large animal practices, feline and exotic animal practices, emergency and specialty practices, laboratory animal facilities, animal shelters, zoos, wildlife management, and diagnostic facilities are considered.

Prerequisites: Enrollment in or completion of a degree in a Veterinary or Business related program and at least 45 credits earned overall, or permission of instructor.

VSAD 308 VETERINARY SERVICE ADMINISTRATION INTERNSHIP ORIENTATION

Spring, 1 credit hour(s)

This course prepares students for the Internship for Veterinary Services Management, helps each student secure an appropriate internship site, helps students plan appropriate tasks and activities to complete during their internships, and establishes a contract between SUNY Canton, the internship site, and the student.

Prerequisites: Senior status in the Veterinary Services Management program or permission of instructor.

VSAD 402 VETERINARY BUSINESS & FINANCIAL MANAGEMENT

Fall, 3 credit hour(s)

This course introduces skills necessary to become proficient in one of the critical competencies required for Certified Veterinary Practice Manager certification: Finance. Students utilize Quickbooks accounting software on a virtual server to perform financial management tasks as they pertain to veterinary medicine and animal industries, and to generate and analyze financial reports. They discuss retirement accounts and investment accounts, and their implementation in a veterinary practice setting. They will also discuss outside entities (accountants, financial advisors) with whom they will work to establish financial accounts, report financial data, and make timely and accurate payment of financial obligations.

Prerequisites: Enrollment in or completion of a degree in a Veterinary or Business related program and at least 45 credits earned overall, or permission of instructor.

VSAD 408 VETERINARY SERVICE ADMINISTRATION INTERNSHIP

Spring, 12 credit hour(s)

This course is intended to be a culminating experience for the student, building upon and reinforcing material of previous course work. Working in conjunction with a field supervisor, the student will perform delegated duties associated with those of a veterinary facility manager or administrator. The internship will be individualized according to

the career interests of the student and the needs of the supervising organization. Internship assignments may include information gathering, analysis, planning, implementation, evaluation, and other responsibilities. The student must complete 40 hours of internship experience to receive one credit hour of course work (for a total of 12 credits/480 hours).

Prerequisites: Senior Seminar (HSMB 410), completion of other program requirements, or permission of the Program Director or Dean.

VSCT 100 HUMAN ANIMAL BOND

Fall, 1 credit hour(s)

The Human Companion Animal Bond course is an interdisciplinary approach to understanding human animal relationships. Topics include mechanisms of attachment, social and psychological aspects of human animal interactions, pet loss and bereavement, physical and mental health benefits of animals, and animal assistance therapy programs. Major focus will be on developing the student's interdisciplinary knowledge and understanding of the issues surrounding animals in society.

VSCT 101 FUNDAMENTAL VETERINARY NURSING SKILLS I

Fall, 2 credit hour(s)

This course introduces students to the Veterinary Technology profession and fundamental animal care nursing skills. Students learn how to properly restrain cats and dogs, administer parenteral injections on models, take a patient history, complete medical records, conduct a physical examination, and perform clinical procedures related to primary patient care. Students also learn to identify cat and dog breeds and surgical instruments. Competencies related to basic nursing care are conducted at the end of the course. Course is limited to freshman students in the Veterinary Science Technology curriculum. One hour lecture, two hours laboratory per week. This course is a prerequisite to all other required VSCT courses.

Prerequisites: BIOL 150, CHEM 150, VSCT 103, or permission of instructor.

VSCT 102 COMPANION ANIMAL BEHAVIOR

Spring, 2 credit hour(s)

This course is designed to help veterinary technicians gain insight and understanding into normal animal behavior. Emphasis is on analyzing problem behavior, preventative counseling, taking a behavioral history and client education of common canine and feline behavioral problems. In addition, avian and equine behavioral issues will also be discussed.

Prerequisites: VSCT 203, VSCT 204.

VSCT 103 INTRODUCTION TO ANIMAL AGRICULTURE

Fall, 2 credit hour(s)

An introductory course designed to familiarize the student with the use of animals to produce food, fiber, or profit. Beef cattle, dairy cattle, horses, sheep, swine, goats, and other animals will be discussed. The intent of this course is to provide the student with insight as to the functions and needs of the animal owner/producer. Common production schemes, terminology, and animal breeds will be addressed.

Prerequisites: Enrollment in Veterinary Technology (2278) or Veterinary Science Technology (521).

Course Descriptions: Veterinary Technology

VSCT 104 VETERINARY OFFICE PRACTICES *Spring, 1 credit hour(s)*

This course introduces basic veterinary office practices that would be expected of a graduate veterinary technician. The course covers business and professional skills such as: recordkeeping, scheduling appointments, professionalism and client communication. This course also provides hands-on experience with current veterinary practice software.

Prerequisites: VSCT 101 Fundamental Veterinary Nursing Skills I and restricted to Veterinary Technology (2278) or Veterinary Science Technology (521).

VSCT 112 VETERINARY CLINICAL PATHOLOGY I *Spring, 3 credit hour(s)*

An introduction to Veterinary Clinical Pathology as it relates to normal and abnormal physiology of animal species. Emphasis will be placed on techniques and sample handling rather than diagnosis. This course includes instruction in general laboratory equipment, use and function of spectrophotometer, and the proper preparation of biological samples. Students will learn basic diagnostic techniques that include complete blood count, urinalysis, and examination of feces for internal parasites. Enrollment limited to students in the veterinary technology programs (521 & 2278).

Prerequisites: VSCT 101 or permission of instructor.

VSCT 114 ANIMAL ANATOMY & PHYSIOLOGY *Spring, 3 credit hour(s)*

An introduction to the fundamental understanding of animal structure and function. Emphasis placed on the practical aspects of anatomy and physiology of different species. Discussion will include tissues, organs, and body systems which make up the living mammalian organism. Two hours lecture, two hours laboratory per week.

Prerequisites: VSCT 101 and BIOL 105, or permission of instructor.

VSCT 115 FUNDAMENTAL VETERINARY NURSING SKILLS II *Spring, 2 credit hour(s)*

This course is a continuation of material covered in Fundamental Veterinary Nursing Skills I. Students review handling and restraint techniques for dogs and cats and continue with identification of dog breeds and surgical instrumentation.

Students identify, handle, and discuss husbandry of birds, small mammals, and selected exotic species. Instrumentation and restraint techniques for horses and livestock are also covered. Students perform nursing procedures including wound care and bandaging, diagnostic procedures for the eye, and subcutaneous and intramuscular injection techniques, among others, and discuss the examination and care of pediatric and geriatric patients. Students perform surgical preparation and assisting techniques, CPR, and endotracheal intubation on models and prepare surgical instruments and supplies for use. Animal welfare and the pet overpopulation crisis are also covered and client education is further developed. This course has 50 minutes of lecture and two hours of laboratory per week.

Prerequisites: VSCT 101 - Fundamental Veterinary Nursing Skills I or permission of instructor

VSCT 201 VETERINARY TECHNOLOGY PRECEPTORSHIP I *Spring, 1 credit hour(s)*

The preceptorship is designed to involve the students in the daily activities that are encountered in a veterinary practice, animal research facility or other allied animal health facility. The clinical site is selected by the student, however, they must be under the direct supervision of either a licensed veterinarian or a licensed veterinary technician. A minimum of 120 hrs of participation in a position relating to veterinary technology in a faculty approved facility is required. The preceptorship is performed during the summer.

Prerequisites: VSCT 101, VSCT 103, VSCT 104, VSCT 112, VSCT 114, VSCT 115.

VSCT 202 VETERINARY CLINICAL PATHOLOGY II *Fall, 3 credit hour(s)*

A course of continued study (VSCT 112) in veterinary clinical pathology dealing with diagnostic laboratory procedures and their correlation with pathological conditions. This course includes discussion of normal hematology of the common domestic mammals and birds. Hematopoiesis, classification of anemias and abnormal leukograms are also covered. Students will also be instructed in the identification, life cycles and controls of animal parasitisms as well as the method and interpretation of a complete urinalysis. Laboratory practice is Hematology, Chemistry, Parasitology and Urinalysis of all the major domestic species of animals is included.

VSCT 203 SMALL ANIMAL MEDICINE & THERAPEUTIC TECHNIQUES *Fall, 3 credit hour(s)*

This course is designed to introduce the students to many of the common procedures performed by licensed veterinary technicians in a small animal clinical situation. The students will be instructed on many of the common canine and feline diseases and will become familiar with the signs, therapeutic treatments and methods of prevention. Small animal zoonotic diseases will be discussed to familiarize the students to the topics that veterinary staff are frequently called upon to answer. The students will perform venipuncture and intravenous catheter placements. Other procedures such as cystocentesis, stomach tube placement, blood transfusions, EKG use and splint application will be demonstrated. Students will anesthetize the animals used in the laboratories so that the skill for that week can be performed. Students will assist with the neutering of the animals after the lab skills for that week are completed and will be allowed to assist with the anesthetic monitoring and the recovery of the animals

Prerequisites: VSCT 112, VSCT 114, VSCT 115

VSCT 204 LARGE ANIMAL MEDICINE & THERAPEUTIC TECHNIQUES *Fall, 2 credit hour(s)*

Course is designed to prepare the Veterinary Science student for a role in a large animal veterinary practice. Emphasis will be on restraint and handling, physical exam and therapeutic methods of the food, fiber and equine patient. Students will also have an understanding of specialized diagnostics, anesthetic principles and surgeries and associated with these

animals. This course also includes discussion of regulatory medicine and its importance to agriculture and public health.

Prerequisites: VSCT 112, VSCT 114, VSCT 115.

VSCT 205 RADIOGRAPHIC TECHNIQUES *Fall, 2 credit hour(s)*

This course is designed as an introduction to radiological and other types of imaging in a veterinary facility. Students will be required to position patients, calculate exposure values, exposed radiographic film and process films manually, automatically and digitally. Students will examine radiographs taken by their lab groups and critique them for their diagnostic quality.

Students will be instructed on radiation hazards and how to avoid them. The use of ultrasound will be demonstrated and alternative technologies for imaging such as fluoroscopy, CT, MRI and nuclear scintigraphy will be discussed.

Prerequisites: VSCT 112, VSCT 114, VSCT 115

VSCT 206 ANESTHETIC PRINCIPLES *Fall, 3 credit hour(s)*

This course is an introduction to anesthetic principles as they relate to animal medical and surgical care. The student will be presented with information on basic preanesthetic agents, anesthetic agents, and anesthetic monitoring devices. The student will have hands-on experience with preanesthetic, anesthetic, and postanesthetic evaluation/monitoring techniques and devices. Students will be presented with the potential human and animal hazards associated with anesthetic drugs. CPR and the recognition and treatment of emergency situations will be addressed. Pain control and analgesics commonly used in multi-modal pain treatment will be covered.

Prerequisites: VSCT 114, VSCT 115.

VSCT 207 HEALTH & DISEASE OF FARM ANIMALS *Fall, 3 credit hour(s)*

This course is designed to acquaint students with the most common infectious and non-infectious diseases of cattle, horses, sheep, goats and swine. The causative agent of these diseases will be identified and emphasis will be placed on care of the animal and the prevention of these disease. Basic discussion of immunology and vaccination theory is also included as well as proper husbandry of these animals and how this relates to the wellbeing of these animals. Diseases of public health importance and zoonotic potential are also included.

Prerequisites: Enrollment in Veterinary Technology (2278) or Veterinary Science Technology (521) and BIOL 150.

VSCT 209 VETERINARY TECHNOLOGY PRECEPTORSHIP II *Fall, 1 credit hour(s)*

The preceptorship is designed to involve the students in the daily activities that are encountered in a veterinary practice, animal research facility or other allied animal health facility. The clinical site is selected by the student, however, they must be under the direct supervision of either a licensed veterinarian or a licensed veterinary technician. A minimum of 120 hrs of participation in a position

Course Descriptions: Veterinary Technology, Welding

relating to veterinary technology in a faculty approved facility is required. Emphasis in this course is on the integration of skills learned in the veterinary technology clinical coursework during the previous semesters. These tasks may include history taking and physical exam, surgical nursing, laboratory procedures, radiology as well as therapeutics and animal care. The preceptorship is performed during the winterterm.

Prerequisites: VSCT 202, VSCT 203, VSCT 204, VSCT 205, VSCT 206, VSCT 207.

VSCT 210 VETERINARY MICROBIOLOGY *Spring, 3 credit hour(s)*

This course consists of the study of pathogenic organisms encountered in animals and the diseases that they cause. Basic concepts of cytology and the interpretation of cytological slides are also covered. The laboratory focuses on the management of a veterinary microbiology lab as well as the isolation and identification of veterinary pathogens. Enrollment is limited to students in the veterinary technology programs (521 & 2278)

Prerequisites: BIOL 209, VSCT 112, VSCT 202, VSCT 203, VSCT 207.

VSCT 211 ANIMAL HOSPITAL PRACTICES AND PROCEDURES *Spring, 3 credit hour(s)*

This course is considered the capstone course for the Veterinary Science Technology curriculum and is only open to students in their last semester of the program. This class creates an environment similar to that of a working veterinary practice and allows students to practice and further enhance the skills necessary for a licensed veterinary technician. During each class meeting, students are required to write graded assignments. They will also complete longer reflective papers as part of the semester assignment. Students are also required to research a case study and prepare a written reference paper and deliver an oral presentation using PowerPoint. Students enrolling in this class are expected to perform two weeks of kennel duty.

Prerequisites: VSCT 201, VSCT 202, VSCT 203, VSCT 204, VSCT 205, VSCT 206, VSCT 207, VSCT 209.

VSCT 212 RESEARCH ANIMAL TECHNIQUES *Spring, 1 credit hour(s)*

This course is a foundation course in developing skills necessary for employment in an animal research facility. Husbandry and clinical techniques specific to laboratory animals will be discussed. Emphasis will be on providing quality animal care, monitoring the health and well-being of laboratory animals, and understanding ethical issues surrounding animal research. Enrollment limited to students in the veterinary science programs (521 & 2278).

Prerequisites: Fundamental Veterinary Nursing Skills I (VSCT 101) or permission of instructor.

VSCT 213 PRACTICAL NUTRITION *Spring, 2 credit hour(s)*

This course will cover the feeding of small animals in health and disease during the various stages of the life cycle. The major dietary nutrients will be discussed at length. Nutrient deficiencies and excesses will be discussed and human and animal

case examples used. Dietary management of specific diseases that affect small animals (and to a lesser extent large animals) will be a primary focus. Home-made, raw and commercial diets will be discussed. Interpreting pet food labels and calculating the amount of food to feed an animal will be covered.

Prerequisites: VSCT 114, VSCT 115

VSCT 214 VETERINARY PHARMACOLOGY *Spring, 2 credit hour(s)*

This course is designed for Veterinary Science Technology students as an introduction to Pharmacology. The various classes of drugs used in Veterinary medicine will be discussed in regard to use, side effects, contraindications, method of administration, etc. Upon completion of this course, a student should have a working knowledge of the commonly used drugs in a veterinary hospital. One hour lecture, two hours laboratory per week. This course is only open to fourth semester Veterinary Science Technology students who have successfully completed all prior Veterinary Science courses.

Prerequisites: VSCT 202, VSCT 203, VSCT 206.

VSCT 303 ADVANCED VETERINARY NURSING *Spring, 3 credit hour(s)*

This course aids students who have already completed fundamental courses in veterinary technology in developing their knowledge and skills. Emphasis on specific concepts of patient assessment, critical care nursing, advanced fluid therapy, transfusion medicine, respiratory therapy and mechanical ventilation, rehabilitation, advanced imaging, clinical nutrition, and emergency medicine. Use of advanced electronic equipment in veterinary practice is discussed.

Prerequisites: VSCT 202, VSCT 203, VSCT 205, VSCT 206, and at least 45 credits earned, or permission of instructor.

VSCT 305 ANIMAL BEHAVIOR IN VETERINARY PRACTICE *Spring, 3 credit hour(s)*

This course examines the normal and abnormal behavior of domestic animals, with emphasis on analyzing companion animal behavior disorders, taking a behavioral history, examining treatment methods and providing client education and preventative counseling. Common pharmaceutical therapies used in behavioral modification will be discussed. Domestic ruminant, bird and captive animals' behavioral issues will also be discussed.

Students will be expected to analyze case studies and discuss possible modification tactics.

Prerequisites: VSCT 203 Small Animal Medicine and Therapeutic Techniques, VSCT 204 Large Animal Medicine and Therapeutic Techniques.

VSCT 401 ISSUES & PERSPECTIVES IN VETERINARY MEDICINE *Fall, 3 credit hour(s)*

This course allows the student to explore legal and ethical issues as they pertain to veterinary medicine and animal industries. Students are required to thoroughly research topics and present their own thoughts and conclusions. Student research, debate, case studies, and other modalities are used.

Prerequisites: VSCT 202, VSCT 203, VSCT

204 and at least 45 credits earned overall, or permission of instructor.

WELD 101 OXY-FUEL WELDING, CUTTING, AND PLASMA CUTTING *Fall, 4 credit hour(s)*

This course begins with compressed gas and general shop safety. Oxy-fuel cutting, welding, and brazing are covered along with plasma cutting. Additional cutting methods will be discussed, including more traditional saw cutting methods and laser cutting.

WELD 102 SMAW (STICK) & GOUGING *Fall, 4 credit hour(s)*

In this course, students learn about Shielded Metal Arc Welding with an overview and use of multiple electrode materials. All positions and procedures are taught and practiced as they apply to each electrode, to include gouging.

WELD 103 BLUEPRINT READING *Fall, 3 credit hour(s)*

In this course, students learn the technical skills required for blueprint reading. This includes the interpretation of trade drawings and welding symbols, and the application of those skills to practical situations.

WELD 110 GMAW & FCAW (MIG) *Spring, 3 credit hour(s)*

In this course, students learn the basic technology/equipment as well as the practical skills required for Gas Metal Arc Welding and Flux Core Arc Welding processes. Welding non-ferrous metals with spool gun attachments are also covered.

Prerequisites: WELD 101 or WELD 102.

WELD 112 METALLURGY & TESTING *Spring, 3 credit hour(s)*

In this course, students learn the basic metallurgy knowledge needed for welding including heat treating. Metal and weld testing processes are also covered.

WELD 113 SHEET METAL FABRICATION *Fall, 3 credit hour(s)*

In this course, students learn pattern making and metal bending processes for sheet metal fabrication. Spot welding and press brake procedures are also covered.

Prerequisites: WELD 101, WELD 103

WELD 201 GTAW (TIG) *Fall, 4 credit hour(s)*

In this course, students learn the basic technology/equipment as well as the practical skills required for Gas Tungsten Arc Welding of both ferrous and non-ferrous metals.

Prerequisites: WELD 101, WELD 102

WELD 202 CODE & INSPECTION *Spring, 2 credit hour(s)*

Welding codes and inspection processes are covered.

Prerequisites: WELD 112

Course Descriptions: Welding, Wellness, Yoga

WELD 210 **WELDING CERTIFICATION** *Spring, 3 credit hour(s)*

This course covers the various certifications available in the welding industry as well as the procedures to qualify for a specific weld. Students perform welding certification and qualification procedures.

Prerequisites: WELD 110, WELD 201, WELD 202.

WELD 211 **BLACKSMITHING & ORNAMENTAL FABRICATION** *Spring, 3 credit hour(s)*

Casting, forging, heat treating, and blacksmithing practices are covered.

Prerequisites: WELD 101, WELD 112.

WELD 212 **FABRICATION & REPAIR** *Spring, 2 credit hour(s)*

Students will use techniques and procedures common to the welding and fabrication industry to build functional assemblies and repair parts, including cast iron.

Prerequisites: WELD 110, 112, WELD 113, WELD 201

WELL 101 **YOGA**

Fall/Spring, 1 credit hour(s)

In this course, students will be introduced to basic yoga postures, breathing techniques, meditation and relaxation.

WELL 102 **PERSONAL FITNESS** *Fall/Spring, 1 credit hour(s)*

In this course, students will focus on fitness theory, basic fitness training and conditioning principles, and work towards individual fitness goals.

WELL 103 **PRACTICING MINDFUL LIVING AND MINDFULNESS** *Fall/Spring, 1 credit hour(s)*

Explore mindful living and meditation in the context of health and wellness. Students will learn and practice a variety of approaches and applications to mindfulness, and reflect on their experiences.

WELL 104 **ALTERNATIVE APPROACHES TO MENTAL AND PHYSICAL WELLNESS** *Fall/Spring, 1 credit hour(s)*

Explore the various mind-body approaches to mental and physical wellness. Comprehensive overview of fundamental concepts of theory and philosophy and common applications of each practice. Students will gain understanding of the terms “holistic” and “alternative” in the context of health and wellness practices and approaches. The practices reviewed are often integrated into a larger health-care plan for individuals, so students will gain understanding into their most common complementary roles. Topics will be presented* by professionals in the field, giving students firsthand access to discuss the practice with highly experienced individuals. Reading material prior to class will be based on recommendations by the presenting practitioner. The course is designed to expand the students’ knowledge of practices associated with psychological and physical wellness. This course

is not intended, nor designed, to train or certify individuals to practice any of the covered topics.

WELL 380 **FOUNDATIONS IN MIND-BODY HEALTH AND WELLNESS** *Fall/Spring, 3 credit hour(s)*

Engage in an interdisciplinary examination of what it means to be “well.” Using a biopsychosocial framework and the mind-body connection as a foundation for study, students will explore a definition of health that involves the satisfaction of physical, psychosocial, cultural, economic, and spiritual needs (among others). Students will undertake a critical examination of how wellness has been defined across different cultures (both historical, and current); explore the West’s preoccupation with wellness as an individual pursuit; examine the social structures and institutions that contribute to/are necessary for people and communities to be well; dissect the normalization of stress and how it disrupts health and wellness; and reflect on their own personal practices that lead to health and wellness.

WELL 382 **THE LIMITLESS MIND: LESSONS ON DEDICATION, RESILIENCE AND MENTAL FORTITUDE** *Fall/Spring, 3 credit hour(s)*

In this course, students will explore the concept of the limitless mind as it relates to athletic endeavors and other life applications. Colloquially referred to as “grit,” a term that has expanded in its usage over the years, students will learn about a host of traits and skills that contribute to the development and deployment of mental fortitude. In particular, students will examine the concepts of working strenuously toward challenges, maintaining effort and interest over years despite failures and adversity, self-discipline, managing plateaus in performance, among others, as they apply to athletic endeavors (e.g., ultramarathonin.g) and a variety of other life domains, such as schools and workplaces.

YOGA 105 **YOGA NIDRA** *Fall/Spring, 1 credit hour(s)*

Introduction to Yoga Nidra (“yogic sleep”) and its traditional and clinically tested benefits. Yoga Nidra is a guided meditation technique practiced while lying down, eyes closed. This technique falls under the limb of yoga called pratyahara, or sense withdrawal, as it is practiced by focusing only on sound and internal awareness. The practice has been traditionally used to explore the self (memories, emotions, instincts, drives), and increase awareness throughout all stages of consciousness to improve memory, learning, and sleep, plus decrease anxieties, bad habits and more. In the modern day, there has been research exploring the state of consciousness produced by the practice, as well as how it can be applied for stress, hormonal irregularities, sleep, and anxiety.

YOGA 120 **YOGA THEORY** *Fall/Spring, 3 credit hour(s)*

Introduction to yoga theory and philosophy, and current research related to types of yoga and how they differ, why yoga is practiced and how it can apply to and benefit daily life. Students will learn about the 8 limbs of ashtanga yoga, plus bandhas and mudras introduced in hatha yoga, and physiology

of various breathing techniques and yoga postures.
Prerequisites: WELL 101.



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The nation's largest comprehensive public university system, The State University of New York (SUNY), was established in 1948. Since its founding, the SUNY system has evolved to meet the changing needs of New York's students, communities, and workforce. SUNY initially represented a consolidation of 29 unaffiliated institutions, including 11 teachers colleges. All of these colleges, with their unique histories and backgrounds, united for a common goal: To serve New York State.

Today, the system includes 64 schools, a mix of 29 state-operated campuses and five statutory colleges—including research universities, liberal arts colleges, specialized and technical colleges, health science centers, land-grant colleges—and 30 community colleges. These institutions offer programs as varied as ceramics engineering, philosophy, fashion design, optometry, maritime studies, law, medical education, and everything in between. The University also operates hospitals and numerous research institutes.

SUNY is embedded in virtually every community in New York State: Remarkably, 93 percent of New Yorkers live within 15 miles of a SUNY campus, and nearly 100 percent live within 30 miles. In many communities, SUNY is also the region's largest employer. While SUNY students are predominantly New York State residents, hailing from every one of the state's 62 counties, the University also draws students from every other state in the United States, the District of Columbia, four U.S. territories, and 160 nations from around the world. One out of three New York State high school graduates choose SUNY, and the total enrollment of nearly 400,000 full-time and part-time students represents 37 percent of New York State's higher education student population. SUNY also employs 88,000 faculty and staff and counts more than 3 million living alumni, residing in New York State and throughout the world.

SUNY attracts the best and brightest scholars, scientists, artists, and professionals and boasts nationally and internationally recognized faculty in all major disciplines.

Faculty are regular recipients of prestigious awards and honors.

The State University of New York is committed to serving as the state's strongest economic and quality-of-life driver and providing quality education at an affordable price to New Yorkers and students from across the country and the world.

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JOSEPH MALEK (23), *Student Support Librarian*, M.S., San Jose State University

JESSICA M. SPOONER (05), *Interim Library Director & Technical Services & Electronic Resources Librarian*, B.A., M.S. Ed., SUNY Potsdam; M.L.S., SUNY Buffalo

BENJAMIN VAN TOL (25), *Outreach & Instruction Librarian*, B.A., Davis College; M.L.I.S., University of Albany

ONLINE LEARNING

JERRY J. BARTLETT (06), *Learning System Manager*, A.S., SUNY Canton; SUNY Canton President's Meritorious Service Award 2013

ALLISON BOND (19), *Sr. Instructional Designer*, B.A., SUNY Potsdam; M.S.ED., SUNY Potsdam

ANTONIA JOKELOVA (19), *Director of Online Learning*, M.A., University of Southern Alabama; M.A., Pedagogical University; Ph.D., University of Southern Alabama

MATTHEW NICHOLS (09), *Instructional Technologist*, M.S., SUNY Potsdam

BENJAMIN RAWDON (20), *Instructional Designer*, B.A., Saint John Fisher College; M.Ed., SUNY Potsdam

DAVID J. SCOVIL (14), *Online Learning Technician*

REGISTRAR

SHARON E. TAVERNIER (09), *College Registrar*, A.A.S., Paul Smith's College; B.S., M.Ed., University of Alaska Fairbanks

EDEN E. TERRELL (23), *Assistant Registrar*, MA., School for International Training (SIT)

STUDENT ACCESSIBILITY SERVICES

DERRICK GIDDEN (24), *Assistant Director of Student Accessibility Services*, M.S. Ed, SUNY Potsdam

MEGAN R. RIEDL (16), *Director of Student Accessibility Services*, M.S., SUNY Potsdam

JENNIFER SMITH (24), *Testing Coordinator*, M.S. Ed, SUNY Potsdam

TUTORING SERVICES

MELISSA L. MANCHESTER (08), *Director of Tutoring Services*, B.A., SUNY Potsdam; M.A., SUNY Potsdam

ROBIN L. PALM (09), *Business/Accounting Lab Coordinator*, A.A.S., B.A., SUNY Canton

JACLYN O. RYAN (20), *STEM Lab Coordinator*, M.S. ED, SUNY Potsdam

DIVISION OF ADMINISTRATIVE SERVICES

KYLE A. BROWN (08), *Assistant Vice President*, B.A., SUNY Potsdam; M.S., Clarkson University

SHAWN K. MILLER (98), *Vice President for Administration/Chief Financial Officer/Operations Manager*, A.A.S., B.B.A., SUNY Canton; M.B.A., SUNY IT; SUNY Canton President's Meritorious Service Award 2001

AMANDA D. ROWLEY (12), *Assistant to the Vice President for Administration*, A.A.S., SUNY Morrisville; B.S., SUNY Brockport; Excellence in College Service Award 2023

STUDENT ACCOUNTS

ALICIA J. FLYNN (06), *Senior Staff Assistant*, M.S., SUNY Potsdam

MARY J. JAMES (17), *Financial Analyst*, M.B.A., Clarkson University

BUSINESS OFFICE

AMANDA L. CRUMP (16), *Director of One Hop Shop & College Accountant*, M.B.A., Clarkson University

MELISSA J. TULIP (17), *Budget Director*, B.A., Siena College

MEGAN WARREN (16), *Purchasing & Contract Administrator*, B.F.A. SUNY Potsdam

Campus Directory: Administration

ENVIRONMENTAL HEALTH & SAFETY

ANTHONY M. CARACCILO (08), *Life Safety Systems Manager*; A.A.S., SUNY Canton

DEREK L. CONVERSE (15), *Environmental Health & Safety Manager*; B.S., SUNY Cortland

JEFFREY L. MERRILL (24), *Campus Safety Specialist*, B.S., Black Hills State University

FACILITIES

MARTIN D. AVERY (88), *Director of Physical Plant Operations*; A.S., SUNY Empire; SUNY Canton Employee Recognition Award 2008

DEREK BATEMAN (07), *Plant Superintendent*; A.A.S., SUNY Canton

SCOTT HAZEN (22), *Project Site Representative*

MICHAEL R. MCCORMICK (97), *Assistant Vice President for Facilities*; A.A.S., SUNY Canton; B.T., Rochester Institute of Technology; SUNY Canton President's Meritorious Service Award 2011

MICHELLE A. O'BRIAN (11), *Project Site Representative*; A.A.S., SUNY Canton

BRIAN C. TERIELE (15), *Project Site Representative*; B.S., Clarkson University

FINANCIAL AID

NICOLE S. CONSIGLIO (24), *Financial Aid Counselor*, B.S., SUNY Potsdam

SUZANNE E. DAVIS (23), *Director of Financial Aid*, M.S., SUNY Potsdam

PAIGE A. DUSTIN (24), *Financial Aid Counselor*, M.B.A. Clarkson University

STACEY M. HAWKINS (22), *Financial Aid Counselor*; B.T., SUNY Canton

KRISTINE K. LEESON (23), *Financial Aid Counselor*, A.A., Pima Community College

AMANDA M. TALAVERA (23), *Financial Aid Counselor*, B.A., SUNY Potsdam

HUMAN RESOURCES

JOANN C. ELLIS (24), *Director of Human Resources*; M.S. Indiana State University

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INFORMATION SERVICES

MARK R. BICKELHAUPT (98), *Telecommunications Manager & Head Men's and Women's Golf Coach*; SUNY Canton's Excellence in College Service Award 2022

RONDA L. CURTIS (96), *Systems Analyst Programmer*; B.A., SUNY Potsdam; SUNY Canton's Excellence in College Service Award 2022

AIDEN DONAH (24), *Helpdesk Technician*, A.S. SUNY Canton

KEVIN D. ELLIOTT (11), *Senior Programmer-Analyst*; B.A., SUNY Potsdam; SUNY Canton's Excellence in College Service Award 2022

ZACHARY ERLICHMAN (19), *Systems Administrator*; B.S., SUNY Canton; SUNY Canton's Excellence in College Service Award 2022

BRANDON FERROTTA (21), *Systems Administrator*, B.S., SUNY Canton

BRIAN S. FETCIE (01), *Systems Manager*; A.A.S., SUNY Canton; B.S., Clarkson University; SUNY Canton's Excellence in College Service Award 2022

STEVEN J. FETCIE (97), *Infrastructure Manager*; A.A.S., SUNY Canton; B.S., Clarkson University; M.S., Clarkson University; SUNY Canton's Excellence in College Service Award 2022

LUCAS HARPER (18), *Sr. Infrastructure Technician*; A.A.S., SUNY Canton; SUNY Canton's Excellence in College Service Award 2022

RISHI KOTADIYA (23), *Lead Programmer Analyst*; M.S. SUNY Albany

H. JOSEPH LEROUX (11), *Security Systems Administrator*; A.A.S., B.Tech, SUNY Canton; SUNY Canton's Excellence in College Service Award 2022

BENJAMIN M. MATOTT (16), *Academic Computing and User Services Manager*; A.A.S., SUNY Canton; SUNY Canton's Excellence in College Service Award 2022

M. TERESITA MURPHY (03), *Administrative Information Systems Manager*; B.S., University of the Philippines; SUNY Canton's Excellence in College Service Award 2022

EDWARD J. MURPHY (15), *Lead Programmer-Analyst*; A.S., Holyoke Community College; B.S.E.E., University of Lowell; B.S.IT., University of Massachusetts; SUNY Canton's Excellence in College Service Award 2022

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EDMUND M. SMITH (18), *Learning Spaces Coordinator*; B.A., M.S.E., SUNY Potsdam; SUNY Canton's Excellence in College Service Award 2022

KELLY D. WOOSLEY (24), *Programmer Analyst*, B.A. Old Dominion University

UNIVERSITY POLICE

TIMOTHY M. ASHLEY (22), *Chief of Police*; M.Ed., St. Lawrence University

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DIVISION OF ADVANCEMENT

JAMIE L. BURGESS (12), *Director of Alumni Engagement & Foundation Communications*; B.A., SUNY Oswego

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SARAH HARTMAN-RICHARDS (18), *Assistant Director of Development & Gift Officer*; A.A., SUNY Canton

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KOLBY WEAVER (21) *Stewardship, Retention, & Scholarship Manager*; B.B.A., SUNY Canton

DIVISION OF STUDENT AFFAIRS

COURTNEY B. BISH (02), *Vice President for Student Affairs/Dean of Students*; A.A.S., Jefferson Community College; B.S., M.Ed., St. Lawrence University; SUNY Canton's Excellence in College Service Award 2021; SUNY Canton President's Meritorious Service Award 2021

ATHLETICS

ALEXANDER G. BOAK (15), *Head Men's Ice Hockey Coach*; B.S., Clarkson University

JUSTIN BROOKS (23), *eSports Coordinator*; B.S. SUNY Canton

COOPER COLESANTE (24), *Head Volleyball Coach*, B.S. Wells College

VANESSA S. COOK (19), *Assistant Athletic Trainer*; B.S., Alfred University

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PATRICK M. HARRINGTON (14), *Director of Athletic Facilities*; Men's Lacrosse Coach; B.S., Nazareth College

NATHANIEL C. HART (13), *Director of Athletic Communications and Marketing*; B.A., SUNY Oswego; M.S., Elmira College

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PATRICK K. MARTIN (00), *Assistant Athletic Director-NCAA Compliance*; B.S., SUNY Cortland

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TERESA K. MINCKLER (05), *Associate Director of Athletics*; A.A.S., Mater Dei College; B.S., University of North Carolina at Pembroke; M.S.T., SUNY Potsdam; SUNY Canton President's Meritorious Service Award 2020

BRYAN M. O'CONNOR (05), *Athletic Facilities Assistant*; A.A.S., B.A., SUNY Canton; M.S., SUNY Potsdam

BRYAN D. PARKER (07), *Fitness Center, Pool, and Intramurals Director*; B.S., SUNY Potsdam; M.A., St. Lawrence University; SUNY Canton President's Meritorious Service Award 2021

TIMOTHY M. PENROD (13), *Men's Head Soccer Coach*; B.S., Juniata College

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DYLAN SEIKEL (22), *Men's Head Basketball Coach*; B.S., University of Akron

RANDY B. SIEMINSKI (05), *Director of Athletics, Recreation and Intramurals*; B.S., St. Lawrence University; SUNY Canton President's Meritorious Service Award 2015

RYAN STEVENS (24), *Baseball Head Coach*

ADAM TODD (14), *Women's Head Lacrosse Coach*; B.A., Cabrini College

COUNSELING

MELINDA A. MILLER (96), *Director of Counseling*; B.A., SUNY Potsdam; M.S., C.A.S., St. Lawrence University; Licensed Mental Health Counselor; SUNY Canton's Excellence in College Service Award 2011

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JENNIFER L. POLNIAK (17), *Associate Counselor*; B.A., SUNY Potsdam; M.S., St. Lawrence University

JAMES L. SHEPPARD (08), *Assistant Director of Counseling*; B.A., SUNY Buffalo; M.S., SUNY Plattsburgh; Licensed Mental Health Counselor

HEALTH SERVICES

JULIE A. CRUICKSHANK (06), *Associate Director of Health Services*; A.A.S., SUNY Canton; B.S.N., SUNY Plattsburgh; M.S., Grand Canyon University; RN

ROSEMARIE C. HEISSE (98), *College Physician*; B.A., Boston University; PhD, Philadelphia College of Osteopathic Medicine

JENNIFER HYNES (12), *Supervisor of College Nursing Services*; LPN, North West Tech

FARREN C. LOBDELL (07), *Director of Wellbeing Programs and Initiatives*; B.A., SUNY Potsdam; M.S., SUNY Plattsburgh

KATHARINE M. MATTHIS (23), *Physician Assistant*; M.S. University of Nebraska Medical Center

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TAMMY ROTONDE (24), *Director of Health Services*

KRISTIN WESTON (18), *Nurse Practitioner*, D.N.P., Frontier Nursing University

STUDENT LIFE

NICODEME F. AUGUSTE (16), *Associate Director of Residence Life/ Director of Title IX*, B.S., SUNY Canton; M.Ed., St. Lawrence University

ROBERT BRUCE (13), *Assistant Director of Student Activities, Involvement, and Leadership (SAIL)*; B.M., Berk-lee College of Music

PRISCILLA COLLINS (11), *Executive Director of Student Activities, Involvement, and Leadership (SAIL)*; A.A.S., B.B.A., SUNY Canton; M.A., CUNY Queens College; Health Care Management Certificate, St. Joseph's College; Health Care Administration & Policy Advance Certificate, CUNY School of Professional Studies; SUNY Chancellor's Award for Excellence 2023

CHELSEA DEGROAT (18), *Assistant Director of Student Engagement & Greek Affairs*; A.A.S., B.S., SUNY Canton; Health Care Management; M.S. SUNY Potsdam

LASHAWANDA T. INGRAM (05), *Director of Diversity and Orientation/ Chief Diversity Officer*; B.S., M.S., SUNY Buffalo; Chancellor's Award for Excellence in Professional Service 2018

JOHN M. KENNEDY (06), *Director of Residence Life & Men's Cross-Country Coach*; A.S., SUNY Canton; B.S., SUNY Geneseo; M.Ed., St. Lawrence University

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KRISTEN B. ROBERTS (07), *Assistant Dean of Students*; B.A., Mount St. Mary College; M.Ed., St. Lawrence University; NorthStar Award 2013

RICHARD J. THAYER (13), *Director of Student Affairs Technology*; A.A. Monroe Community College; B.A., SUNY Potsdam; M.S., John Jay College of Criminal Justice; SUNY Canton President's Meritorious Service Award 2021

SARAH L. TRUAX (13), *Associate Director of Residence Life*; B.S., SUNY Cobleskill



Campus Directory: Academic Personnel

RASHID K. AIDUN (07), *Associate Professor, Engineering Science*; B.S., National University of Iran; M.S., Syracuse University; Ph.D., Clarkson University; Chancellor's Award for Excellence in Faculty Service 2018

KIRSTEN ANDERSEN (22), *Lecturer, Nursing*; M.S., Walden University

AMANI M. AWWAD (98), *Associate Professor, Sociology*; B.A., Siena Heights University; M.A., Ph.D., Western Michigan University; Research Foundation Award for Research and Scholarship 2005

BRANDON J. BALDWIN (06), *Associate Professor, Automotive Technology*; A.A.S., SUNY Morrisville; B.S., Cornell University; M.Ed., Buffalo State College

WILLIAM DAVID BARNES (05), *Associate Professor, Science*; B.A., University of MT; M.S.T., SUNY Potsdam; Ed.D., Capella University

RAZA A. BHATTI (24), *Assistant Professor*; B.S. Punjab University; M.S. Quaid-e-Azam University; M.ENG. University of Alberta

JENNIFER K. BOURDETTE (18), *Instructional Support Associate, Engineering Technology-GMMD*; B.A., SUNY Canton

KIMBERLY BOYD (14), *Lecturer, Social Sciences*; M.S., College of William and Mary

DEREK J. BROWN (23), *Instructional Support Associate, Physical Therapy*; A.S., SUNY Canton

MATTHEW J. BURNETT (06), *Professor, Graphic Multi-Media Design*; A.S., North Country Community College; B.A., SUNY Plattsburgh; M.F.A., Maine College of Art; MED, St. Lawrence University; Chancellor's Award for Excellence in Scholarship and Creative Activities 2021

ROBERT F. BURNETT (06), *Assistant Professor, Civil Engineering & Construction Technology*; A.A.S., SUNY Canton; B.A., SUNY Potsdam; M.Ed., St. Lawrence University

BROOKE M. BUSH (18), *Instructional Support Associate, Nursing*; A.S., SUNY Morrisville

DAVID T. BUTTON (11), *Lecturer, Business*; B.A., Southern Methodist University; M.S., Rensselaer Polytechnic Institute; Distinguished Citizen Award 2012

DARIEN B. CAIN (20), *Assistant Professor, Funeral Service Administration*; B.S., M.S., SUNY Potsdam; Distinguished Faculty Award 2024

KEVIN M. CARVILL (16), *Sr. Lecturer, Criminal Justice*; B.A., St. Lawrence University; J.D., SUNY Buffalo

YU CHIN CHENG (08), *Associate Professor, Industrial Tech. Mgmt.*; B.M., Fengchia University; M.P.M., Northwestern University; M.S., Ph.D., University of Wisconsin-Madison

JESSE L. CLARK-STONE (08), *Assistant Professor, Mathematics*; A.S., SUNY Canton; B.A., M.A., SUNY Potsdam; Ph.D., Clarkson University

CHAD COLBERT (22), *Lecturer, Business*; M.B.A., Wake Forest University

LISA E. COLBERT (01), *Sr. Lecturer, Criminal Justice*; A.A.S., SUNY Canton; B.A., SUNY Potsdam, M.A., SUNY Empire State College

ROBERTO COMELLA (20), *Lecturer, Decision & Graphic Media Systems*; B.S., Polytechnic of Turin

LUCAS W. CRAIG (12), *Associate Professor, Mechanical Engineering Technology*; A.S., Jefferson Community College; B.S., M.S., Ph.D., Clarkson University; SUNY Canton President's Meritorious Service Award 2018; Chancellor's Award for Excellence in Teaching 2022

TIMOTHY DAVEY (99), *Lecturer, Computer Information Systems*; M.B.A., Regis University

KIMBERLY A. DAVIES (15), *Assistant Professor, Nursing*; B.A., Graceland University; B.S.N., M.S., M.S.N., University of St. Francis; RN; DNP, Capella University

JONDAVID S. DELONG (08), *Professor, Legal Studies*; J.D., SUNY at Buffalo Law

PUTTAGOUNDER DHANASEKARAN (21), *Associate Professor, Mechanical & Energy Systems*; M.E., PSG College of Technology University of Madras; Ph.D., Wichita State University

ALICIA M. DUNN (21), *Instructional Support Technician, Veterinary Technology*; A.A.S. SUNY Canton

KENNETH M. ERICKSON (97), *Professor, School of Science, Health, and Criminal Justice, Science*; B.S., East-ern Illinois University; M.A., SUNY Geneseo; D.V.M., University of Illinois College of Veterinary Medicine; SUNY Canton Distinguished Faculty Award 2004

MARELA FIACCO (08), *Associate Professor, Business*; B.B.A., Freed-Hardeman University; M.B.A., Middle Tennessee State University; Ph.D., North Central University; SUNY Canton President's Meritorious Service Award 2021

KELLY FICNER (18), *Associate Professor, Criminal Justice*; Ph.D., Cappella University

JENNIE H. FLANAGAN (12), *Sr. Lecturer, Business*; A.S., B.T., SUNY Canton; M.A., Seton Hall University

TIFFANY FORSYTHE (23), *Lecturer, Applied Psychology*; M.A., Abilene Christian University

STEPHEN E. FREMPONG (06), *Professor, Electrical Engineering Technology*; B.E.T., City College of the City University of New York; M.S., Pace University; Ph.D., California Coast University; Chancellor's Award for Excellence in Scholarship and Creative Activities 2015

KARLI B. FRENCH (22), *Assistant Professor, Nursing*; RN, B.S.N., St. John Fisher College

MEHDI GHAYOUMI (22), *Assistant Professor*, Ph.D., Kent State University

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ANGELINA Y. GLOVER (24), *Assistant Professor*, D.N.P., Vanderbilt University

SAEID HAJI GHASEMALI (22), *Associate Professor*; B.S., Iran University of Science & Technology; M.S., Sharif University of Technology; Ph.D., Amirkabir University

EMILY A. HAMILTON-HONEY (12), *Associate Professor, Humanities*; B.A., Western Michigan University; M.A., University of Michigan; Ph.D., University of Massachusetts

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Campus Directory: Academic Personnel

NICOLE A. HELDT (95), *Professor, Biology and Chemistry*; A.S., Jefferson Community College; B.S., SUNY Oswego; M.S.T., SUNY Potsdam; Ph.D., Clarkson University

TASIA HILTON-BETTON (22), *Lecturer, Healthcare Management*; Ph.D., Walden University

FENG HONG (05), *Associate Professor, Physics*; B.S., Zhejiana University; M.S., Ph.D., North Dakota State University; SUNY Canton Distinguished Faculty Award 2010

CHENGRU HU (04), *Professor, Finance*; B.S., Peking University; Ph.D., Rutgers University

PHILIP JAMES (19), *Assistant Professor, Accounting*; B.S., M.S., University of West Indies; Ph.D., University of Technology, Jamaica

ANGELA E. JOHNSON (22), *Assistant Professor, Nursing*; M.S. SUNY Poly

MICHELLE L. JOHNSTON (09), *Associate Professor, Criminal Justice*; B.A., SUNY Potsdam; M.L.S., Florida State University; Ph.D., Nova Southwestern University; Chancellor's Award for Excellence in Professional Service 2016

KIRK K. JONES (07), *Associate Professor*; A.A., SUNY Canton; B.A., M.A., SUNY Potsdam; Ph.D., Indiana University of Pennsylvania; Chancellor's Award for Excellence in Faculty Service 2022

WILLIAM T. JONES (08), *Professor, Business & Legal Studies/Co-Chief Diversity Officer*; A.S., Jefferson Community College; B.A., SUNY Oswego; M.A., Boston University; J.D., Syracuse University College of Law; Chancellor's Award for Excellence in Faculty Service 2016

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ELENA A. KHAPALOVA (20), *Assistant Professor, Business*; A.B., Mount Holyoke College; M.B.A., Washington State University; Ph.D., Washington State University

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WENDY K. KUCEYESKI (21), *Assistant Professor, Veterinary Science*; B.A., Hirma College; Ph.D. Ohio State University

UMESH KUMAR (09), *Professor, Finance*; B.S., Magadh University; M.B.A., University of Mumbai; Ph.D., University of Texas at San Antonio; Chancellor's Award for Excellence in Scholarship and Creative Activities 2016

PEGGY S. LAFRANCE (05), *Professor, Nursing*; B.S.N., SUNY Plattsburgh; M.S. in Nursing, Syracuse University; Ph.D., Walden University; RN

PHILIP K. LAMARCHE (11), *Associate Professor, Humanities*; B.A., M.F.A., Syracuse University; Chancellor's Award for Excellence in Teaching 2021

MELISSA E. LEE (09), *Associate Professor, Humanities*; B.A., LeMoyne College; M.A., Marquette University; Ph.D., Indiana University of Pennsylvania

CHRISTINA M. LESHKO (18), *Lecturer, Social Science*; M.A., Michigan State University; Ph.D., University of the Cumberland; President's Meritorious Service Award 2024

CHRISTINA H. LESYK (12), *Associate Professor, Psychology*; B.A., Columbia University; M.S.W., Hunter College; SUNY Chancellor's Award for Excellence 2023

JIAYUAN LIN (07), *Professor, Mathematics*; B.S., Anhui University, China; M.S., Chinese Academy of Sciences, China; Ph.D., University of California

SHANE MACARTHUR (19) *Instructional Support Associate, Mechanical & Energy Systems*; B.T. SUNY Canton

MAUREEN F. MAIOCCO (04), *Distinguished Teaching Professor, Early Childhood*; B.A., Curry College; M.S., Wheelock College; Ed.D., Nova Southeastern University; SUNY Canton Distinguished Faculty Award 2011; Chancellor's Award for Excellence in Teaching 2014; SUNY Distinguished Teaching Professor 2022

CHRISTINA L. MARTIN (11), *Sr. Lecturer & Student Teacher Coordinator, Early Childhood*; B.A., SUNY Cortland; M.S.T., SUNY Potsdam; SUNY Canton President's Meritorious Service Award 2020

KEVIN M. McADOO (11), *Sr. Lecturer, Mathematics*; A.S., SUNY Canton; B.S., Clarkson University; M.A., University at Albany

SAMANTHA L. MCCARTHY (23), *Assistant Professor, Nursing*; M.S.N. Walden University

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PATRICK R. McMANUS (18), *Lecturer, Social Science*; M.S., St. Lawrence University

MATTHEW G. METCALF (00), *Sr. Lecturer, Sports Management*; B.A., Saint Bonaventure University; M.S.S., US Sports Academy

DEBORAH S. MOLNAR (96), *Professor, Physical Therapist Assistant*; B.S., SUNY Buffalo; M.Ed., SUNY Potsdam; D.P.T., SUNY Upstate Medical University; SUNY Canton's Distinguished Faculty Award 2014

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SEAN T. O'BRIEN (12), *Associate Professor, Humanities*; B.A., Xavier University; Ph.D., University of Notre Dame

EMMA OGLEY-OLIVER (23), *Associate Professor, Social Science*; Ph.D., Georgia State University

LAWRETTA C. ONONYE (07), *Professor, Physics*; B.S., Edo State University; B.S., Knoxville College; M.S., Ph.D., University of Tennessee; Chancellor's Award for Excellence in Scholarship and Creative Activities 2014

BRIGHT A. OSEI (23), *Assistant Professor, Economics*; Ph.D., University of Mississippi

DIANE J. PARA (89), *Professor, Sports Management*; B.S., Ithaca College; M.S., Eastern Illinois University; Ph.D. Capella University; SUNY Canton President's Meritorious Service Award 2007; Chancellor's Award for Excellence in Teaching 2016

Campus Directory: Academic Personnel

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DAVID R. PENEPENT (12), *Associate Professor, Funeral Services Administration*; B.A., University of Wisconsin Oshkosh; M.A., University of Phoenix; Ph.D. Walden University

VICKI PERRINE (15), *Assistant Professor*, M.A., Seton Hall University

STEPHANIE D. PETKOVSEK (13), *Sr. Lecturer, History*; B.A., Syracuse University; M.A., SUNY Buffalo

KRISTINE D. POTTER (19), *Assistant Professor, Science*; Ph. D, SUNY at Buffalo

MELINDA S. PUTNEY (22), *Lecturer, Veterinary Science Technology*; M.A., SUNY Potsdam

SIRVAN RAHMATI (21), *Lecturer, Mathematics*; B.Sc. Sharif University of Technology; M.Sc. University of West Georgia; Ph.D., Wichita State University

ALICE K. REED (04), *Associate Professor, Mathematics*; B.A., M.Ed., SUNY Potsdam; Ph.D. Northcentral University

ANDREW L. REITER (14), *Instructional Support Associate, Civil Engineering & Construction Technology*; A.A.S., SUNY Canton; B.S., Rochester Institute of Technology

WILLIAM P. RIVERS (12), *Associate Professor, Biology*; A.A.S., SUNY Canton; B.A., Grinnell College; M.S., Ph.D., University of Tennessee

CHARLES E. ROBINSON (23), *Assistant Professor, Criminal Justice*; B.A., Wesleyan University; M.A., SUNY Albany; JD, Washington and Lee University School of Law

KIBRIA K. ROMAN (16), *Assistant Professor, Alternative & Renewable Energy Systems*; B.S., Bangladesh University of Engineering and Technology; M.S., Tuskegee University; Ph.D., University of Illinois at Urbana

CORTNEY ROOKEY (18), *Instructional Support Associate, Electrical Engineering Technology*; A.S., SUNY Canton

JAMES A. ROORBACH (19), *Lecturer, Criminal Justice*; B.A., Upper Iowa University; M. Ed., SUNY at Buffalo

KALANI RUBASINGHE (23) *Lecturer, Mathematics*; Ph.D., Clarkson University

ANGELA M. RULFFES (24), *Associate Professor*, Ph.D., Syracuse University

ADRIENNE C. RYSEL (08), *Associate Professor, Civil & Environmental Engineering Technology*; B.S., M.S., Bucknell University; Ph.D., Dalhousie University

JAY SIMMONS (11), *Lecturer, HVAC*; A.A.S., SUNY Canton

STACIA SMITH (07) *Assistant Professor, Computer Information Systems*; A.A.S., B.T., SUNY Canton; M.S., SUNY Potsdam; Ph.D., Purdue University

JENNIFER L. SOVDE (15), *Associate Professor, History*; B.A., Bemidji State University; M.A., Indiana University at Bloomington; Ph.D., Indiana University at Bloomington

JAMIE L. SOVIE (99), *Instructional Support Technician, Science*; A.A.S., SUNY Canton

MEGHAN L. SPADACCINI (24), *Lecturer, Nursing*; M.A. St. Lawrence University

KAREN ST. HILAIRE (15), *Lecturer, Business*; M.S. Clarkson University

JEFFREY M. STINSON (17), *Sr. Lecturer, Engineering Technology*; B.S., SUNY Oswego; M.S., SUNY College at Buffalo

CHRISTOPHER S. SWEENEY (05), *Professor, Graphic Multi-Media Design*; B.A., St. Lawrence University; M.A., Ph.D., University of Rochester

RONALD J. TAVERNIER JR. (07), *Associate Professor, Biology*; A.A., Paul Smith's College; B.S., B.A., Ph.D., University of Alaska Fairbanks; Distinguished Faculty Award 2023

SOPHIA C. THEODORE (05), *Associate Professor, Veterinary Science Technology*; B.A., St. Lawrence University; M.S., University of Missouri-Columbia; D.V.M., University of Illinois at Urbana-Champaign

JONATHAN W. THOMPSON (22), *Sr. Lecturer, Mathematics*; MS.Ed., SUNY Potsdam

SHAWN TIERNAN (11), *Lecturer, Humanities*; B.A., SUNY Potsdam

PAUL TODD (21), *Lecturer, Mechanical & Energy Systems*; B.T., SUNY Canton

PAWEENA WAIDELICH (21), *Lecturer, Criminal Justice*; M.S., Kent State University

MINHUA WANG (03), *Sr. Lecturer, Information Technology*; B.S., M.S., Fudan University, China; M.S., SUNY Buffalo

JAMIE WEBER (14), *Lecturer, Humanities*; M.A., SUNY Potsdam

DUANE WESOLICK (08), *Lecturer, Social Science*; M.A., Western Carolina University

NICHOLAS S. WILDEY (18), *Lecturer, Criminal Justice*; M.S., Pennsylvania State

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ANDREW WOOD (13), *Lecturer, Criminal Justice*; M.S., Boston University; President's Meritorious Service Award 2024

EUNJYU YU (07), *Professor, Humanities*; B.A., M.A., Pusan National University, South Korea; Ph.D., The Ohio State University

ALI S. ZAIDI (07), *Professor, Humanities*; B.A., Regents College; B.A., M.A., Peshawar University; M.A., Queens College; M.A., Ph.D., University of Rochester; Chancellor's Award for Excellence in Scholarship and Creative Activities 2020

DR. BARLOW AIKEN
Professor, Life Sciences (1997)

TIMOTHY ASHLEY
Chief, University Police (2002)

MARTIN AVERY
Director of Operations, Physical Plant (2025)

DR. DEBRA BACKUS
Professor, Nursing (2017)

DR. DAWNE BARKLEY
Associate Professor, Nursing (2024)

DR. D. ANTHONY BEANE
Professor, Veterinary Technology (2021)

ELLEN BEELER
Manager, IT User Services (2007)

HARRIETT BEGGS
Professor, Mathematics (2001)

ROBERT BLICKWEDEHL
Visiting Professor, Civil Engineering (2012)

DOROTHY BOWERS
Professor, Business (1983)

EDWARD BOYD
Instructor, Psychology (2020)

JOHN BOYDEN, JR.
Professor, Electro-Mechanical (1998)

MARY BOYLE
Staff Associate, Computer Center (1997)

CHRISTINE BRASSARD
Assistant Professor, Nursing (2024)

J. ALLAN BURNHAM
Director, Public Safety (1991)

DAVID BUTLER
Professor, Humanities (2010)

DEB CAMP
Director, Counseling (2006)

ANTHONY CARACCILO
Life Safety Systems Manager, Environmental Health & Safety (2025)

PATRICIA CASSARA
Director, Academic Support Services (2012)

DR. PATRICK CASSELMAN
Associate Professor, Mathematics (2023)

ROGER CATLIN
Assistant VP, Administration (1991)

VARICK CHITTENDEN
Professor, Humanities (2000)

MARTIN CLARK-STONE
Professor, HVAC (2016)

MARTHA COLE
Nurse Practitioner (2018)

DR. JOHN CONKLIN
Professor, Nursing (2022)

ELIZABETH CONNOLLY
Assistant VP, Administration (2014)

KERRIE COOPER
Director, Financial Aid (2021)

THERESA CORBINE
Director, Academic Computing (2016)

WAYNE CORDWELL
Associate Professor, Electrical (2002)

BERT COREY
Director, Small Business Development Center (2006)

JOHN CRARY
Dean, School of Engineering Technology (2001)

LEO CURRO
Dean, School of Science, Health, & CJ (1998)

THOMAS DALTON
Professor, Construction (1999)

DR. CINDY DANIELS
Associate Professor, Humanities (2011)

BRUCE DARTT
Professor, Engineering Science (2000)

EARL DAVIES
Professor, Mechanical Technology (1982)

MARY JANE DOELGER
Associate Professor, Nursing (2009)

CAROLE DUNCAN
Instructional Support Technician, Science (1999)

DR. ROBERT EDWARDS
Professor, Criminal Justice (2014)

PATRICIA ENDRES
Student Success Mentor, Accommodative Services (2023)

JOAN EURTO
Assistant to the President (2002)

JOANNE FASSINGER
Grants Coordinator (2017)

DR. WILLIAM FASSINGER
Professor, Criminal Justice (2015)

RENE FAUCHER
University Instructional Specialist, Johnson Ed. Comm. Ctr. (1997)

DANIEL FAY
Professor, Business (2018)

EDWARD FAY
Dean, School of Business & Public Service (2001)

BRYAN FELITTO
Director, Extended Studies (1995)

DR. CHARLES FENNER
Professor, Business (2024)

CHERYL FRANCIS
Assistant Professor, Science (2023)

JANE FRANK
Staff Assistant, Health Services (2013)

DR. ROBERT FRASER
Vice President, Academic Affairs (1991)

STANLEY FRASER
Professor, Mathematics (2002)

WILLIAM FREEBERN
Associate Professor, English (1998)

JOAN FREGOE
Professor, Nursing (1998)

DAWN FREMONT
Instructor, Dental Hygiene (2019)

DR. DANIEL GAGLIARDI
Professor, Mathematics (2022)

STEVEN GILBERT
Associate Professor, Criminal Investigation (2010)

BRENDA GIRRBACH
Director, TRiO (2023)

ROBIN GITTINGS
Instructional Support Technician, Veterinary Technology (2021)

JOHN GOETZE
Director, Physical Plant (1993)

CHARLES GOOLDEN
Vice President, Administration (2001)

DR. EDWARD GORDON
Professor, Veterinary Science (1997)

MICHAEL GORDON
Professor, Economics (2006)

FREDERICK GOTHAM
Associate Professor, Building Construction (2002)

PAULINE GRAVELINE
Associate Provost (2009)

CHRISTINE GRAY
Vice President, Administration (2010)

ROBERT GRAY <i>Campus Site Representative, Physical Plant (2022)</i>	GEORGE JOHNSON <i>Instructional Support Assistant, Engineering (2009)</i>	SANDRA LIVERNOIS <i>Senior Assistant to the Provost/VP, Academic Affairs (2014)</i>
EUGENE GROBELNY <i>Technical Assistant, Physical Education (1989)</i>	JANICE JOHNSON <i>Associate for Technical Services, IT (2017)</i>	STEVEN LIVERNOIS <i>Deputy Chief, University Police (2010)</i>
CAROL GRZYWINSKI <i>Professor, Academic Development (2002)</i>	WILLIAM JONES <i>Professor, Business (2024)</i>	DR. MARY O. LOOMIS <i>Professor, Veterinary Technology (2022)</i>
DAVID GUCCIONE <i>Professor, Criminal Justice (2002)</i>	SHELDON KATZ <i>Professor, Mechanical Technology (1997)</i>	DEBRA LOWRY <i>Special Events Coordinator, Administrative Services (2014)</i>
JAMES HAMILTON <i>Instructional Support Technician, Chemistry (2021)</i>	DAVID KELLER <i>Vice President, Student Affairs/Dean of Students (1997)</i>	DR. EARL MACARTHUR <i>President (1992)</i>
DR. MARCELLINA HAMILTON <i>Associate Professor, Business (2015)</i>	BRUCE KENNA <i>Associate Professor, Social Science (2015)</i>	JOHN MAISONNEUVE <i>College Accountant (2014)</i>
S. FARID-UL HAQ <i>Director, Library (2002)</i>	DR. JOSEPH KENNEDY <i>Professor, Business/College President (2014)</i>	THEODORE MARLOWE <i>Professor, Criminal Justice (2005)</i>
DAVID HARTLE <i>Instructional Support Specialist, Electrical Engineering Technology (2020)</i>	JOAN KEPES <i>Associate Professor, Humanities (1990)</i>	BETHANY MARTIN <i>Director, Procurement (2023)</i>
CHRISTOPHER HASTINGS <i>Senior Staff Assistant, Storehouse (2014)</i>	DR. RALPH KLICHER <i>Associate Professor, Mortuary Science (2011)</i>	TERRY MARTIN <i>Coach, Men's Ice Hockey (1999)</i>
DENISE HEATER <i>Instructor, Dental Hygiene (2014)</i>	DAVID KLOSNER <i>Professor, Accounting (2000)</i>	WILLIAM MASON <i>Chief, University Police (2012)</i>
DR. LINDA HEILMAN <i>Professor, Business (2015)</i>	SUSAN KRAMER <i>Counselor, EOP (2015)</i>	PATRICK MAZZEO <i>Associate Professor, Social Sciences (2002)</i>
DR. ROSEMARIE HEISSE <i>College Physician, Health Services (2023)</i>	RAYMOND KRISCIUNAS <i>Professor, History (2015)</i>	RICHARD MCADAM <i>Instructional Support Associate, HVAC (2020)</i>
PAUL HITCHMAN <i>Instructional Support Associate, Civil and Environmental Engineering Technology (2021)</i>	DANIEL LALLIER <i>Instructional Support Associate, Electrical Construction (2020)</i>	CLAIRE MEDVE <i>Professor, Mathematics (2020)</i>
DR. NANCY HORAN <i>Associate Professor, Humanities (2006)</i>	JOSEPH LAMENDOLA <i>Associate Professor, English (1995)</i>	SHEILA MEHAFFY <i>Assistant for University Systems Analysis, IT (2016)</i>
KATHLEEN HORTON <i>Librarian (2011)</i>	WILLIAM LAPIERRE <i>Professor, Automotive Technology (2002)</i>	WILLIAM MEIN <i>Professor, Computer Information Systems/Assistant Dean, School of Engineering Technology (2010)</i>
ROSALIE HUNTER <i>Associate Professor, Nursing (1987)</i>	LINDA LAW <i>Lecturer, Mathematics (2021)</i>	SUSANNE MERRITT <i>Associate Professor, Secretarial Science (1985)</i>
DR. ARTHUR HURLBUT <i>Professor, HVAC (2007)</i>	DR. STEPHEN LEDOUX <i>Professor, Social Sciences (2015)</i>	RONALD MESHUREL <i>Director, Canton Institute (2006)</i>
MARY HUSE <i>Staff Associate, Development (1999)</i>	BRIAN LEE <i>Senior Staff Associate, Administrative Services (2012)</i>	ANITA MILLER <i>Physician Assistant (1994)</i>
DAVID HYDE <i>Technical Assistant, Air Conditioning (1985)</i>	M. VEIGH MEHAN LEE <i>Counselor, Counseling Center (2021)</i>	DANIEL MILLER <i>Assistant Professor, Mechanical Engineering Technology (2019)</i>
WILLIAM IRVEN <i>Senior Staff Assistant, College Accounting (2007)</i>	GEORGE LEEDOM <i>Professor, Chemistry (2005)</i>	MARK MILLER <i>Director, EOP (2016)</i>
PAULA JACQUES <i>Professor, Nursing (2007)</i>	DONALD LEONARD <i>Assistant Professor, Computer Information (2002)</i>	SHAWN MILLER <i>Vice President, Administration/CFO RF, Operations Manager (2024)</i>
ROBERT JENNINGS <i>Professor, Electrical Engineering Technology (2018)</i>	CHRISTINA HUIE LESYK <i>Associate Professor, Social Sciences (2025)</i>	

KERMIT MORGAN
Professor, Life Sciences (1990)

MARY MORGAN
Associate Professor, Secretarial Science (1983)

ROSANNA MOSER
Professor, Business (2008)

DR. MOLLY MOTT
Associate Provost/Dean, Academic Support Services and Instructional Technologies (2021)

HARRY MOULTON
Instructional Support Associate, Building Construction (2002)

DR. DIANE MUEHL
Associate Professor, Sociology (2018)

GORDON MYERS
Director, Personnel & Affirmative Action (1985)

ALEX NEUBERT
Professor, Physical Science (2006)

DR. JOHN NIXON
Professor, Social Sciences (2010)

DR. MICHAEL O'CONNOR
Associate Professor, Business (2019)

JOHN OHST
Assistant Professor, Academic Development (2006)

KATHLEEN PARKER
Senior Advisor, Financial Aid (2024)

MARILYN PAULS
Instructional Support Technician, Nursing (1996)

MICHAEL PEEBLES
Professor, Science (2010)

DR. ERIC PELLEGRINO
Professor, Business/Executive Assistant to the President (2000)

LINDA PELLETT
Interim Provost/Vice President, Academic Affairs (2010)

ROSEMARIE PHILIPS
Lecturer, Legal Studies (2022)

MICHAEL PINKERTON
Lecturer, Nursing (2020)

ROBERT PINKERTON
Senior Programmer Analyst, IT (1995)

HARRY PODGURSKI
Director, Counseling (1995)

BARBARA PORTER
Registrar (2012)

JUDITH PORTER
Assistant Professor, Office Technology (2009)

JAMES PRENTICE
Director, Telecommunications (1998)

JESSICA PRENTICE
Personnel Associate, Human Resources (1998)

JOHN QUACKENBUSH
Professor, Automotive Technology (1990)

WAYNE RATOWSKI
Associate Professor, Electrical Engineering (2004)

KATHRYN RAYMO
Associate Director, Admissions (2002)

MARIE REGAN
Distinguished Service Professor, English (1996)

ANNE REILLY
Instructional Support Associate, PTA (2022)

JOSEPH REILLY
Assistant Professor, Civil and Construction Technology (2020)

JANICE ROBINSON
Associate Professor, Business (2021)

MARILYN RODEE
Senior Advisor, Admissions (1999)

THOMAS ROGERS
Assistant Professor, Social Sciences (1982)

ELIZABETH ROHR-ADAMS
Executive Director, Research and Sponsored Programs (2024)

DOUGLAS ROSE
Associate Professor, Humanities (2005)

JOHN ROSSI
Associate Professor, Electrical (1995)

DAVID ROURKE
Personnel Director (2017)

NANCY ROWLEDGE
Associate Director, Human Resources (2017)

JOANNE ROZANSKI
Instructional Support Associate, Dental Hygiene (2013)

JOHN RUITBERG
Social Sciences (1991)

SUE RUMMEL
Associate Professor, Humanities (2007)

FREDERICK RYCROFT
Director, Physical Plant (2002)

FREDERICK SABURRO
Lecturer, Mathematics (2022)

GERALD SAWYER
Senior Staff Assistant, Physical Plant (2010)

JOHN SHAPAZIAN, JR.
Associate Professor, Accounting (2000)

ANNE SIBLEY
Assistant to Vice President, Advancement (2019)

STANLEY SKOWRONEK
Lecturer, Air Conditioning Maintenance and Repair, (2021)

CARSON SMITH
Vice President, Administration (2000)

KAREN SPELLACY
Professor, Economics (2022)

ARNOLD STONE
Director, Computer Center (1993)

COLLEEN STONE
Instructional Support Associate, Electro-Mechanical (2009)

DR. MARCIA SULLIVAN-MARIN
Assistant Professor, Nursing (2023)

DANIEL SWEENEY
Vice President, Student Affairs/Dean of Students (2010)

BRUCE TALLON
Coach, Women's Basketball (2016)

TRACEY THOMPSON
Vice President, Advancement Executive Director, Canton College Foundation (2025)

JOANNE THORNHILL
Assistant Director, Community Relations (2010)

ROBERTA THORNLEY
Instructional Support Technician, Science (2007)

PATRICIA TODD
Director, Health Services (2018)

MELVIN TOMALTY
Professor, Mathematics (2002)

DENNIS TUPER
Instructional Support Associate, Automotive Technology (2022)

ERICH VON SCHILLER
Professor, Physical Education (1995)

JENNIFER WAITE
Associate Professor, Social Sciences (2021)

BARRY WALCH
Assistant Professor, Mortuary Science (2009)

TERRY WALDRUFF
Senior Staff Assistant, Student Accounts (2017)

BRIAN WASHBURN
Professor, Science (2014)

DOUGLAS WELCH
Senior Staff Assistant, Physical Plant (2011)

DR. DAVID WELLS
*Dean, Canino School of Engineering Technology
(2013)*

FAYE WHITE
Professor, Mathematics (2001)

DONNA WHITELAW
Assistant Professor, Mortuary Science (2011)

NOEL WHITMAN
*Instructional Support Technician, Information
Technology (2002)*

DR. SUSAN WILLETTE
Professor, Dental Hygiene (2017)

JULIE WILLIAMS
*Business Advisor, Small Business Development
Center (2011)*

THOMAS WINDT
Professor, Humanities (2007)

KENNETH WURSTER
Assistant Professor, Automotive (2016)

Established in 1973, the Canton College Foundation, Inc., was founded for the purpose of soliciting and receiving gifts to support the College's mission by providing scholarships and promoting progress, encouraging professional growth, and cultivating a sense of community dedicated to the highest quality education.

The Canton College Foundation encourages alumni, friends, businesses and corporations as well as other foundations to make gifts to support SUNY Canton. Tuition does not cover the many costs of operating a growing college. In order to maintain our competitive standing, SUNY Canton relies on several funding sources to meet its priorities: advance academic quality, build stronger support for student excellence, cultivate innovative partnerships, develop and maintain cutting-edge technologies, and enhance campus life.

BOARD OF DIRECTORS

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Susan D. Law '92

Shawn K. Miller '03, '08

Ornella T. Parker '14

Richard S. Patri '91

Michael Quenneville '87

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Jon A. Richardson '67

Keith Rosser

Dr. Adrienne C. Rygel

Carl W. Trainor '77, '16

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Sylvia M. Kingston '78

Dr. Earl W. MacArthur

Michael A. Noble '85

Barbara R. Wilder '53, '70

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Consumer Complaint Procedure

LOCAL PROCEDURE

Any person who believes he/she has been aggrieved by the College may file a complaint with the Dean of Students within ninety (90) days of the alleged occurrence or event giving rise to the grievance. Complaints may be made in person, by telephone or in writing. You will be asked to discuss your problem with a responsible college representative, one who may best be able to resolve your concerns. **Students are also reminded of specific procedures for filing academic complaints or allegations of sexual harassment found in the *Student Handbook*.**

In response to a written complaint, the College shall investigate the allegations and respond to the grievant in a timely manner. The College may contact the grievant for further information or clarification of the complaint should the need arise. The complaint may be referred to a responsible campus official for resolution; any final determination of a formal complaint will be made by an individual not directly involved in the alleged problem.

No adverse action will be taken by the College against the student or other complainant.

The College will maintain a written record of the complaint and its resolution or disposition, including appropriate documentation, for a period of six years. Such file shall be retained in the Office of the Dean of Students.

If a grievant wishes, he/she may file a formal written complaint with the State Education Department in accordance with their guidelines (see below). An official complaint form and guidelines are available in the Office of the Dean of Students.

STATE EDUCATION DEPARTMENT PROCEDURES

Section 494C(j) of the Higher Education Act of 1965, as amended, provides that a

student, faculty member or any other person who believes he/she has been aggrieved by an institution of higher education has the right to file a written complaint.

In New York State, a complaint may be filed by any person with reason to believe that an institution has acted contrary to its published standards or that conditions at the institution appear to jeopardize the quality of the institution's instructional programs or the general welfare of its students. Any person who believes he/she has been aggrieved by an institution may file a written complaint with the Department within five years of the alleged incident.

HOW TO FILE A COMPLAINT

For all types of complaints concerning colleges and universities in New York State, the first course of action must be to try to resolve the complaint directly with the administration of the college or university involved. The Office of College and University Evaluation will not review a complaint until all grievance procedures at the institution have been followed and all avenues of appeal exhausted and documentation provided that such procedures have been exhausted. Please note: Every New York State college and university is required to establish, publish, and enforce explicit policies related to redress of grievances.

Please do not send a complaint to the Office of College and University Evaluation until you have read all of the information below. This will assure that you are sending your complaint to the appropriate agency/office.

The Office of College and University Evaluation handles only those complaints that concern educational programs or practices of degree-granting institutions subject to the Regulations of the Commissioner of Education, with the exceptions noted below.

- The Office does not handle anonymous complaints.
- The Office of College and University Evaluation does not intervene in matters concerning an individual's grades

or examination results, as these are the prerogative of the college's faculty.

- The Office does not handle complaints concerning actions that occurred more than five years ago.
- The Office does not intervene in matters that are or have been in litigation.
- Complaints concerning programs in fields leading to professional licensure (e.g., nursing) should be directed to:

Office of the Professions

Professional Educ. Program Review
Education Building, 2 West
Albany, NY 12234

- A complaint against a college in the State University system should be sent to:
State University of New York
Central Administration
State University Plaza
Albany, NY 12246
- A complaint involving discrimination against enrolled students on the part of an institution or faculty, or involving sexual harassment, should be filed with the U.S. Office for Civil Rights:

Office for Civil Rights - New York State
U.S. Department of Education
32 Old Slip, 26th Floor
New York, NY 10005-2500
Telephone: 646-428-3900
Fax: 646-428-3843
TDD: 877-521-2172
E-mail: OCR.NewYork@ed.gov

- A complaint of consumer fraud on the part of the institution should be directed to the Office of the New York State Attorney General, Justice Building, Empire State Plaza, Albany, NY 12223.
- For a complaint about state student financial aid matters, contact the Higher Education Services Corporation (HESC) Customer Communications Center at 1-888-NYS-HESC.

Complainants should be aware that the Office of College and University Evaluation does not conduct a judicial investiga-

tion and has no legal authority to require a college or university to comply with a complainant's request.

If your complaint does not fall into one of the exceptions noted above, you may obtain a complaint form at the following link (www.highered.nysed.gov/ocue/complaintform.pdf) or by contacting the Office of College and University Evaluation, New York State Education Department, Education Building, 5 North Mezzanine, 89 Washington Avenue, Albany, New York 12234. Official complaint forms and guidelines are also available in the Office of the Dean of Students.

COMPLAINT RESOLUTION

Some complaints may fall within the jurisdiction of an agency or organization other than the State Education Department. These complaints will be referred to the entity with appropriate jurisdiction. When a complaint concerns a matter that falls solely within the jurisdiction of the institution of higher education, the complainant will be notified and the Department will refer the complainant to the institution in question and request that the matter receive a review and response.

Upon conclusion of the Department's complaint review or upon a disposition of the complaint by referral to another agency or organization, or to the institution of higher education, the Department will issue a written notice to the complainant describing the resolution of the complaint. The complainant may contact the Department evaluator directly for follow-up information or for additional assistance.

A.A. DEGREE

Associate in Arts degree. A transfer degree requiring at least 45 hours of liberal arts courses. Students in the Liberal Arts and Sciences: General Studies program have an option of enrolling in the A.A. or the A.S. degree program.

A.A.S. DEGREE

Associate in Applied Science degree. A career degree preparing students for employment upon completion of the SUNY Canton program or enrollment in an applied baccalaureate degree. Requirements include at least 20 hours of liberal arts courses while the remaining courses provide the training needed for the student's chosen career field. Many four-year colleges accept graduates with A.A.S. degrees.

ACADEMIC RECOVERY

A designation by the Dean of the appropriate School for a student with less than satisfactory academic progress. Students on academic recovery must follow a plan designed to improve their performance.

APPLIED ELECTIVE

A college course outside of the liberal arts and sciences disciplines.

ARTICULATION AGREEMENTS

Formal agreements between SUNY Canton and bachelor degree-granting colleges, community colleges, or high schools describing conditions for transfer such as GPA and program or course requirements.

A.S. DEGREE

Associate in Science degree. A transfer degree requiring at least 30 credit hours of liberal arts courses. The remainder of the courses selected are based on the student's intended transfer major.

ASSOCIATE DEGREES

Degrees which require a minimum of 60 credit hours (excluding physical education) and may be completed in two years of full-time study.

BACCALAUREATE DEGREES

Degrees which are completed in approximately four years of full-time study, gen-

erally including 120 to 128 credit hours. They require two years of study at a transfer college after graduating from SUNY Canton or enrollment in one of SUNY Canton's baccalaureate degree programs, designed for graduates of an A.A.S. program or freshmen interested in an applied baccalaureate degree.

CERTIFICATE PROGRAMS

Students completing an organized program of courses, approved by SUNY and registered by the State Education Department, are awarded certificate diplomas. These programs develop skills in a particular discipline or occupational specialty. Certificate programs have minimum credit hour and GPA requirements specific to each program. Certificate programs may require some course work in mathematics, humanities, and science.

Local Certificates: SUNY Canton may recognize students who successfully complete a specified sequence or cluster of approved, credit courses by awarding a local certificate of completion. Such awards of themselves are not registered, aid-eligible programs and are not transcribed. Local certificates shall be subject to review and approval by the established faculty governance process for curricular matters.

COURSE OUTLINE

Detailed description and content of a course. Copies are housed in the School Deans' Offices.

CREDIT HOUR

A semester credit hour is granted for satisfactory completion of one 50-minute session of classroom instruction per week for a semester of fifteen weeks. Semester credit hours are granted for various types of instruction as follows:

1. Lecture/Recitation—A semester credit hour is an academic unit earned for fifteen 50-minute sessions of classroom Instruction.
2. Lab/Practicum - Forty-five 50-minute sessions of such activity would also normally earn one semester credit hour. Where such activity involves substantial outside preparation by the student, the

equivalent of fifteen periods of 100 minutes duration each will earn one semester credit hour.

3. Independent Study - One credit for independent study will be awarded for the equivalent of forty-five 50-minute sessions of student academic activity.

CURRICULUM

(also Program or Major)

All courses offered. Also refers to an academic program and the full scope of courses needed to complete it.

DIRECTED STUDY

Constitutes an alternate delivery of a course to be used in the student's program of study when a particular course is not offered in the semester he/she wishes to take it. The material covered in a directed study course is essentially the same as that covered in the traditional course.

EQUIVALENT CREDIT HOURS

When the content of a course is developmental and not considered college level, equivalent credit hours are earned and are not counted toward degree requirement. They may count toward certificate requirements.

FRESHMAN

A student who has earned 0 - 29 credit hours, all of which must be a part of a degree program offered by the College.

FULL-TIME STUDENT

Anyone enrolled for twelve or more credit hours or equivalent credit in a semester. A typical course load would be 15 credit hours per semester or approximately five courses.

GENERAL EDUCATION REQUIREMENTS

The ten Knowledge and Skills Areas (GER 1-10) and the two Competencies designated by SUNY as required for graduation with a baccalaureate degree. Knowledge and Skill Areas: Mathematics; Natural Sciences; Social Sciences; American History; Western Civilization; Other World Civilizations; Humanities; The Arts; Foreign Language; Basic Communication. Competencies: Critical Thinking and Information Management.

GENERAL ELECTIVE

Any college course may serve as a general elective if it meets the minimum requirements of a curriculum. Exceptions may include physical education courses, equivalent credit courses, or courses designated for a particular program only.

GOOD STANDING

Students who meet the minimum requirements of the Student Academic Re-registration Policy are considered to be students in good standing.

GPA (Grade Point Average)

For each credit hour, points are assigned based on the grade received. This average is calculated by dividing the total grade points earned by the number of credit hours taken.

HUMANITIES

Art; music; foreign languages; philosophy; most 200-level English, media communication, speech, or theater courses; and courses with the prefix HUMA.

INDEPENDENT STUDY

A planned educational process which is available to the student who wishes to broaden his/her educational experience beyond normal course structure and classroom and/or laboratory activity. Independent Study is intended to be an offshoot of an existing course. It provides the student with an opportunity to pursue/research a subject in more depth and in a more independent manner than would be possible in a traditional course. Independent study does not apply to past life/work experiences for satisfactory completion of proficiency or challenge examinations.

JUNIOR

A student who has earned 60 - 89 credit hours, all of which must be a part of a degree program offered by the College.

LABORATORY SCIENCE

Any science course which has a laboratory experience along with lectures. Examples include biology, chemistry, environmental science, and physics.

LIBERAL ARTS ELECTIVE

Any course from the areas of humanities, sciences, mathematics, and social sciences.

LOAD

The total number of credit and equivalent credit courses for which a student has registered. Example: a registration of 9 credit hours and 4 equivalent credit hours equals a load of 13 hours.

MATRICULATION

This is a process that involves application to the College, admission to a specific academic program and enrollment in courses. An advantage of matriculation is that you officially come under the set of regulations described in the catalog in effect at the date of your matriculation. You must be matriculated to receive financial aid.

OCCUPATIONAL

A.A.S. degrees are generally considered occupational degrees. Students in these programs are preparing for a career or job upon graduation from SUNY Canton or to continue in a bachelor's degree program.

PART-TIME STUDENT

Anyone who is enrolled in fewer than twelve credit hours in a semester.

PEDAGOGY

The science or art of teaching or education.

PREREQUISITE

A requirement that must be met before a student may take a course. Each course description indicates whether there is a prerequisite.

PROGRAM ELECTIVE

A course from a program-related discipline designated by that program. Each degree program specifies the disciplines applicable to that program.

RECITATION

In addition to lectures and laboratories, some courses require a recitation, which is an individual or small group meeting with an instructor.

SENIOR

A student who has earned 90+ credit hours, all of which must be part of a degree program offered by the College.

SOPHOMORE

A student who has earned 30–59 credit hours, all of which must be a part of a degree program offered by the College.

SOCIAL SCIENCES

Anthropology, economics, geography, government, history, psychology, sociology, or political science.

SUSPENSION

Students who do not meet minimum academic requirements for returning and are dismissed from the College for at least one semester

SUNY

All of the units of the State University of New York, including Canton.

SYLLABUS

A statement of the requirements for a course and the course material to be covered. Each professor should distribute a syllabus in the first week of class.

TRANSCRIPT

An official copy of the permanent record of every course taken and the resulting grades. This permanent record is maintained in the Registrar's Office.

TRANSFER PROGRAM

Programs which are generally designed for students who want to continue their studies toward a baccalaureate degree. Programs which lead to the A.A. (Associate in Arts) and the A.S. (Associate in Science) degrees transfer easily into B.A. (Bachelor of Arts), B.S. (Bachelor of Science), or B.Tech. (Bachelor of Technology) degrees.

WITHDRAWAL FROM THE COLLEGE

Official notification to the College that a student will not complete the semester. Students submit request to officially withdraw through their UCanWeb account. Grades of "W" are recorded for all courses in progress at the time of the withdrawal.

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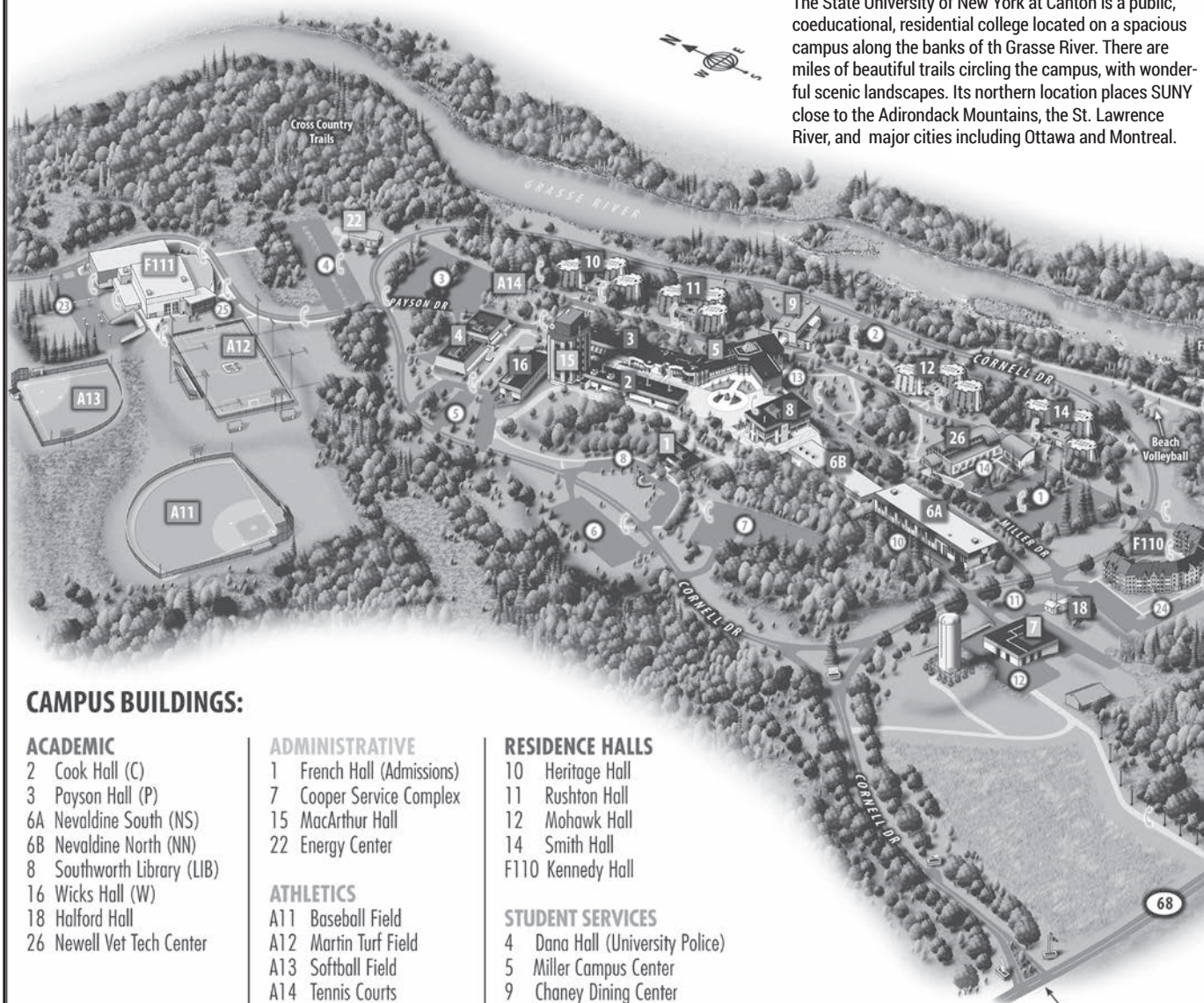
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CAMPUS MAP

The State University of New York at Canton is a public, coeducational, residential college located on a spacious campus along the banks of the Grasse River. There are miles of beautiful trails circling the campus, with wonderful scenic landscapes. Its northern location places SUNY close to the Adirondack Mountains, the St. Lawrence River, and major cities including Ottawa and Montreal.



CAMPUS BUILDINGS:

ACADEMIC

- 2 Cook Hall (C)
- 3 Payson Hall (P)
- 6A Nevaldine South (NS)
- 6B Nevaldine North (NN)
- 8 Southworth Library (LIB)
- 16 Wicks Hall (W)
- 18 Halford Hall
- 26 Newell Vet Tech Center

ADMINISTRATIVE

- 1 French Hall (Admissions)
- 7 Cooper Service Complex
- 15 MacArthur Hall
- 22 Energy Center

ATHLETICS

- A11 Baseball Field
- A12 Martin Turf Field
- A13 Softball Field
- A14 Tennis Courts
- F111 Roos House

RESIDENCE HALLS

- 10 Heritage Hall
- 11 Rushton Hall
- 12 Mohawk Hall
- 14 Smith Hall
- F110 Kennedy Hall

STUDENT SERVICES

- 4 Dana Hall (University Police)
- 5 Miller Campus Center
- 9 Chaney Dining Center

① Parking Lots 1-25

Ⓢ Emergency Blue Light Phones

CAMPUS ENTRANCE