# ACADEMIC CATALOG 2014-2015



### **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 2014-2015

### **FALL SEMESTER**

FALL SEMESTER	
New and Returning Resident Students Check into	
Residence Halls	
Add/Drop Sessions	
Late Orientation	· · · · · · · · · · · · · · · · · · ·
Classes Begin	August 25 (Monday)
Last Day to Late Register or Change Schedule Without Instructor Permission	August 27 (Wednesday, 4 p.m.)
Last Day to Make Up Spring 2014/Summer 2014 Incompletes	September 8 (Monday)
Last Day to Withdraw from First Seven-Week Courses	October 3 (Friday, 4p.m.)
Homecoming and Family Weekend	October 3–5 (Friday–Sunday)
Second Seven-Week Courses Begin	October 13 (Monday)
Midterm Grades Available for Students Online	October 17 (Friday, Noon)
Winterterm 2014 Registration Period Begins	November 3 (Monday)
Advising Week	November 3–November 7 (Monday – Friday)
Spring 2015 Registration Period Begins	November 10 (Monday)
Last Day to Withdraw	November 18 (Tuesday, 4 p.m.)
Thanksgiving Recess - No Classes	November 22–30 (Friday–Sunday)
(Residence halls close 5pm Friday, November 21 -reopen 3pm	Sunday, November 30)
Classes End	
Final Exam Week	
Spring 2015 Registration Period Ends	
Residence Halls Close	
(Students are expected to vacate residence halls 24hrs. after th	
Late Registration Begins	
Final Grades Available for Students Online	
	December 17–January 15, 2015 (Wed., 8 a.m–Thurs., Midnight)
Semester Ends	•
Last Day to Make Up Winterterm and Fall Term 2014 Incomplete	es February 2, 2015 <i>(Monday)</i>
CDDING CELEBER	
SPRING SEMESTER	7 (77)
New Resident Students Check into Residence Halls	
New Student Orientation	
Add/Drop Sessions	
Returning Resident Students Check Into Residence Halls	
Classes Begin	January 19 ( <i>Monday)</i>
Last Day to Late Register or Change Schedule Without	I
Instructor Permission	
Last Day to Make Up Fall 2014 Incompletes	
Last Day to Withdraw from First Seven-Week Courses	
Spring Break – No Classes	day, March 15)
Second Seven-Week Courses Begin	
Midterm Grades Available for Students Online	· · · · · · · · · · · · · · · · · · ·
Summer 2015 Registration Period Begins	The state of the s
Advising Week	
Fall 2015 Registration Period Begins	
Last Day to Withdraw	- · · · · ·
Honors Convocation	1
Classes End	May 1 (Friday)
Final Exam Week	
Fall 2015 Registration Period Ends	May 8 ( <i>Friday, 4 p.m.</i> )
Commencement	May 9 (Saturday, 10:30 a.m.)
Residence Halls Close	
(Students are expected to vacate residence halls 24hrs. after th	
Late Registration Begins	
Final Grades Available for Students Online	
Semester Ends	
Last Day to Make Up Spring 2015/Summer 2015 Incompletes	September 7 (Monday)



### Table of Contents

SUNY CANTON'S MISSION AND GOALS 4
ABOUT SUNY CANTON
Degree Programs
Admissions
Tuition and Fees
Financial Assistance
The Academic Program
Online Learning
ACADEMIC SUPPORT SERVICES
Campus Life         47
Program Offerings
Course Descriptions
The State University of New York
Campus Directory: Administration
Campus Directory: Academic Personnel 186
Canton College Foundation
Consumer Complaint Procedure
GLOSSARY
Index
Campus Map

#### **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

1. Communication Skills

Demonstrates the ability to effectively present, organize, and articulate thoughts, ideas, viewpoints, and conclusions both orally and/or in writing.

2. Critical Thinking

Demonstrates the ability to interpret, apply, analyze, identify, distinguish and

evaluate the assumptions, methodology and/or evidence of concepts, constructs and theory to provide a valid response, conclusion or recommendation.

3. Professional Competence

Demonstrates knowledge and the ability to apply professional, Industry and ethical standards through the development of skills and knowledge consistent in professional practice within the respective discipline. 4. Inter-intrapersonal Skills

Demonstrates an ability to address professional and ethical responsibilities, which may include a respect for diversity; recognize the impact of societal issues within a global context; function effectively as a member or leader of a team; and/or perform self-reflection of personal growth and achievement.

### 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.

### **A**CADEMICS

SUNY Canton is Northern New York's four- and two-year college for technology, health, management and public service. SUNY Canton offers more than 40 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 3,800 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. Southworth Library houses more than 65,000 books, 6,000 microforms, 300 periodical subscriptions and 1,500 video and audio recordings. The library provides access to an impressive number of electronic information research databases.

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. Tutoring services were rated #1 among other SUNY institutions in a student survey and are offered free of charge, enabling students to successfully adjust to college-level academic demands. Students can also check out laptop computers at the library.

New Construction: SUNY Canton's extraordinary recent growth has resulted in the construction of two new beautiful facilities. The College opened its \$42 million athletic facility in July 2011. The massive building includes a brand new ice arena, fitness center, basketball courts, field house, and swimming pool. Other recent additions include a beautiful, lighted, synthetic turf field and a baseball field. The combination of great facilities will provide our sports teams the best training and playing options. SUNY Canton is expanding its sports offerings and has recently added women's volleyball, men's golf, women's ice hockey, women's lacrosse and men's lacrosse. That brings the total number of sports teams to 14, including men's and women's basketball, cross country, soccer; men's ice hockey, softball and baseball. The Kangaroos are a provisional member of the NCAA and also a member of the USCAA.

Grasse River Suites 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 were newly renovated for Fall 2008. They 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. Three brand new bachelor's degree programs were recently approved for Fall 2011. SUNY Canton most recently added a bachelor of science degree in Applied Psychology which will begin being offered in Fall 2012.

### 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).

### ALUMNI ASSOCIATION

The Alumni Association maintains contact between the College and its alumni, keeping them informed about the College's programs and activities and encouraging their participation.

The Association works with the Canton College Foundation in coordinating the College's Annual Fund program 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.

# 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.

	Degree	Programs
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	Deg	gree Programs	75+ on 1st regents or pass 1st	Pass 2nd regents and have taken	2nd regents or	on 3rd	75+	65+ on regents and 75+ on 2nd	75+ on regents & 65+ on chem	regents &	appropri-
CODI		PROGRAM TITLE  Regents Exams (NYS)	regents and have taken	a 3rd	regents	pre- calculus course		math regents	regents	regents	ate neid
^BA	CHELOR	'S DEGREES (ACT/SAT required)	a 2nd regents		regents						
1865	5 <b>56</b>	Alternative & Renewable Energy Systems, B. Tech.			•		•	•			
1965		Applied Psychology, BS		•			•		•		
2235		Civil and Environmental Technology, B. Tech.			•		•				
1359		Criminal Investigation, B. Tech.		•			•				
191		Crimal Justice: Law Enforcement Leadership, B. Tech.		•					•		
0148		Dental Hygiene, 2 + 2, <i>B. Tech</i> .			•		•				•
2234		Electrical Technology, B. Tech.			•		•				
1864		Emergency Management, B. Tech.		•			•				
0282		Finance, BBA		•			•				
1525		Funeral Services Administration, B. Tech.		•			•				
2020		Graphic and Multimedia Design, B. Tech.		•			•				
2254		Health and Fitness Promotion, 2 + 2, <i>B. Tech.</i>			•		•		•		•
0253		Health Care Management, B. Tech.		•			•				
2335		Homeland Security, B. Tech		•							
1935		Industrial Technology Management, B. Tech.			•		•				
2045		Information Technology, B. Tech.			•		•				
0818		Legal Studies, B. Tech.		•			•				
1645		Management, BBA		•			•				
2250		Mechanical Technology, B. Tech.			•		•				
029		Nursing, 2 + 2, BS in nursing		•			•				•
0182		Sports Management, BBA		•			•				
1672		Veterinary Services Management, 2 + 2, B. Tech.		•						•	•
2278	8 78	Veterinary Technology, BS			•		•	•	•		

ENGL CHEM BIO PHYSICS

MATH

### \*ASSOCIATE DEGREES (ACT/SAT recommended)

0630	79	Accounting, AAS	•	1	$\overline{}$		•	Т		
0444	80	Air Conditioning Engineering Technology, AAS		<u> </u>	•	+	•			
0473	81	Apprentice Training: Industrial Trades, AAS	m	ust have	or be wo	orking on	BOCES	Iournevn	nan's Cert.	,
0525	82	Automotive Technology, AAS	•		T	8	•	<i>j</i>		
0632	83	Business Administration, AAS	•			$\top$	•			
0671	83	Business Administration-Transfer, AS		•			•			
0517	84	Civil Engineering Technology, AAS			•					
0581	85	Computer Information Systems, AAS	•				•			
1162	86	Construction Technology: Management, AAS	•				•			
0640	87	Criminal Justice, AAS	•			L	•			
0545	88	Dental Hygiene, AAS **			•		•	75+	•	
1327	89	Early Childhood, AS	•				•			
0699	90	Electrical Engineering Technology, AAS			•		•			
0530	91	Engineering Science, AS			•	•	•			
2208	92	General Technology, AAS			•		•			
0688	93	Individual Studies, AAS								
0250	94	Liberal Arts & Sciences: General Studies, AA, AS		•			•			
0493	95	Mechanical Engineering Technology, AAS			•		•			
0622	96	Nursing, AAS **			•		•	70+	80+	
0489	97	Physical Therapist Assistant, AAS			•		•	75+		
0521	98	Veterinary Science Technology, AAS			•		•	•	•	

### \*COOPERATIVE AGREEMENTS

0250/varies 111	Environmental Science & Forestry, w/SUNY ESF			•	•	•	•	
001/1086 111	Forest Technology, w/SUNY ESF	•			•		•	
0250 111	Upstate Medical Univ. Early Admissions Program			•	•	•	•	

### \*Certificate Programs

1387-Air Conditioning Maintenance & Repair, p. 99 1753-Criminal Justice Studies, p. 100 0955-Electrical Construction & Maintenance, p. 101 1774-Health Science Career Studies, p. 102

1949-Heating & Plumbing Service, p. 103 1632-Powersports Performance and Repair, p.104 0938-Practical Nursing,\*\* p.105

<sup>\*</sup> Refer to Programs of Study (pages 55-111) for specific requirements. \*\* Selective Admission (see page 88, 96, and 105 for more information). If you have questions, are a transfer or an out-of-state student, please call the Office of Admissions (1-800-388-7123) for more information.

### 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) with a minimum score of 245/2450 or achieved the minimum passing requirements for each subject on the Test Assessing Secondary Completion (TASC) test. Please review the prerequisites listed for each program. All admissions decisions are subject to the discretion of the Director of Admissions. For students needing preparatory courses before being admitted to a program of interest, it may be necessary to extend the time needed to complete the academic program and to earn an associate or baccalaureate degree. This will not affect students enrolled in one-year certificate programs.

Admitted students will be required to submit a \$100 enrollment deposit, which is refundable if students withdraw prior to May 1st.

Full-time SUNY Canton students selecting an associate degree must declare a major by the end of two semesters (24 college credit hours). Full-time students pursuing a baccalaureate degree must declare a major by the end of three semesters (36 college credit hours).

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, or a Certificate of one-year study. While most curricula are available to new students only in the Fall Semester of each academic year, some may commence in either Fall or Spring semesters.

### **ADMISSION INTERVIEWS**

Prospective students and their families are strongly encouraged to visit the campus and discuss college plans with an admissions counselor. Admissions interviews are offered Monday through Friday, as well as at Open Houses on select Fridays and Saturdays. The interview provides an opportunity to discuss curricula and career choices, college life, and financial aid at the College. All visiting students and their families will be offered a tour of the campus. Tours are offered regularly at 10 a.m. and 2 p.m., Monday through Friday.

Please contact the Office of Admissions at 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 or www.suny.edu/student. In addition to the application form, applicants must submit all secondary school transcripts, showing date of graduation or score reports for the General Equivalency Diploma, and all previous college transcripts to the Office of Admissions at SUNY Canton.

# WHEN TO APPLY FOR ADMISSION

FOR ADMISSION

Prospective students are encouraged to submit their application before April 1 for the fall semester and December 1 for the spring semester. Decision with respect to admission are made on a rolling basis, unless otherwise specified. An applicant for an associate's degree in Dental Hygiene, Nursing, Physical Therapist Assistant, Practical Nursing, or Veterinary Sci-ence Technology and the bachelor's degree in Veterinary Technology is required to submit their application by February 1. Candidates for admission to the spring semester should carefully review www.canton.edu for the listing of available spring-start programs. There are no spring admits to selective programs (except transfer students from a similar pro-grams).

### 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 (GED) with a minimum score of 245/2450, or meet certain home-school criteria.
  - **IEP diplomas are not considered.** Students with an IEP diploma must pass the GED with a score of 245/2450.
- 2. Have completed, with a satisfactory level of achievement, the minimum course prerequisites for the curriculum selected.
- 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, rank-in-class, pattern of course work). For candidates not applying directly from high school, additional criteria, such as an essay, may be required.

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:

- A high school diploma from an accredited state secondary school.
- Letter from Superintendent of Schools certifying that the student has completed the substantial equivalent of a four-year high school course. In addition, please provide a copy of the student's coursework and any other documents that will aid in the decision process (e.g. ACT/SAT scores).

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

- 1. Option #1 as stated above.
- 2. Option #2 as stated above.
- 3. GED with a score of 245/2450.
- 4. Proof of passing and completing all requirements for the required five Regents examinations or approved alternative assessments for these examinations.
- Completing 30 semester hours or the equivalent as a recognized college-level or certificate at a degree-granting institution.
- 6. Proof of previously earning and been granted a degree from a degree-granting institution.

The above is in compliance with section 3.47 of the Rules of Regents and with section 100.10 of the Regulations of the Commissioner of Education. In addition to submitting the above, students may be required to take the Accuplacer exam for placement purposes.

### 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, and ACT or SAT scores or cer-tain program demands. Transfer students must demonstrate a "C" 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. Placement testing must take place prior to Orientation. SUNY Canton offers both on-site and remote testing possibilities. For detail and prac-tice test items, go to www. canton.edu/testing.

### 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, 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.

### Honors Program

The purpose of SUNY Canton's Honors program is to attract and retain academically gifted students and provide them with an outstanding educational experience. The Honors program is designed to enhance student's academic and personal growth. All Honors program students are required to abide by the following requirements:

· Remain aware of Honors Program in-

- formation by checking their email and attending mandatory monthly meetings during the academic year
- Maintain a minimum 3.2 GPA\*
- Complete at least 15 hours of honors course credits for 4-year students by the completion of their academic program
- Complete at least 9 hours of honors course credits for 2-year students by the completion of their academic program
- Must have 85% participation in the Honors program seminars per academic year (i.e. faculty research presentations)
- Must have 85% participation in the Honors program non-seminar activities per academic year; complete an honors project or paper to be presented at the Scholarly Activities Fair
- Attend at least 3 honors events per semester on and off campus
- Fulfill at least 25 hours of community service by completion of their academic program for 4-year students
- Fulfill at least 15 hours of community service by completion of their academic program for 2-year students
- Inform the Honors Program Coordinator whenever their address (including phone number and email) or academic major changes
- Attend class regularly unless a legitimate excuse is given; maintain academic integrity

\*If an honors student's GPA falls below 3.2, he or she will be placed on honors probation for a maximum of two semesters. Honors program students are expected to maintain a GPA of 3.2 to retain active status in the program. Each Honors program student's grades will be reviewed at the end of each semester. A letter will be sent informing the student of his/her status. Students on honors probation may not enroll for either honors independent study nor may they enter into an honors contract. If the GPA is still below 3.2 after two semesters, the student will be dismissed from the program.

Once eligible and accepted for the Honors program, students are encouraged to seek out honors contract courses. An honors contract course includes:

- An agreement between a student and a faculty member; and
- Provides an opportunity for a student to complete an independent project in a non-honors class by further exploring related topics in an existing class.

Non-honors courses can be turned into honors courses through contracts to help satisfy Honors program requirements.

In general, honors contract courses satisfy more rigorous standards than are generally expected by the non-honors syllabus. An honors contract course should delve more deeply into the subject matter for the course addressing more sophisticated questions and methods. While the honors modifications to the course should fit within the content and intent of the course's learning outcomes, the character and quality of the assignment should be augmented. Simply increasing the volume of work required does not constitute an honors activity; whenever possible, the honors assignments should be done as an alternative to some or all of the regular course assignments. An honors contract course should provide planned opportunities for the student to meet with the instructor to review, discuss, and revise, as needed, the honors components of the course.

### ADMISSION PROCEDURES AND REQUIREMENTS FOR INTERNATIONAL STUDENTS

An application for admission may be completed online at www.canton.edu/apply or www.suny.edu/student. In addition to the application form, applicants must submit an autobiographical essay, secondary school transcripts (translated to English),

and all previous college transcripts (must be translated to English and evaluated by a credential service, such as World Education Services, www.wes.org), to the Office of Admissions at SUNY Canton. A \$50.00 non-refundable application fee (in U.S. funds) must accompany the application. 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. As an alternative method of payment, certified check can be made payable to SUNY ASC.

Students for whom English is a second language, a Test of English as a Foreign Language (TOEFL) score of at least 500 (paper), 173 (computer) or 61 (Internet-Based) is required for admission consideration. Other tests, such as IELTS, SAT, and ACT will be looked at for admission if the TOEFL is not offered in your area. 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 FMCC for a period of time based on their level of proficiency. Once they have successfully complete 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.

To be assured for full consideration for Fall admission, the application must be submitted no later than July 1<sup>st</sup>. If applying for Spring admission, the application must be completed with all supporting documents no later than December 1<sup>st</sup>. 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 passport copy with the biographical information and photograph, and the Foreign Student Financial Statement 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 supporting documents should be sent to Office of Admissions, SUNY Canton, 34 Cornell Drive, Canton, NY 13617-1098, USA

# Transfer Student Admission

Applicants, who have previously registered at another college or university, following graduation from high school, 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. High school transcripts are not required from students who have completed 30 or more college credit hours from a regionally accredited institution. 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 course work shall be determined by the respective School Dean. A preliminary evaluation of coursework will be sent via email. A final approved evaluation can later be viewed on the student's UCanWeb page. Courses completed at another institution transfer only as credits, quality points do not transfer. A letter grade of "C" or better is required for credit.

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

Transfer Student Academic Requirements

TO RE-REG- ISTER FOR SEMESTER:	COMPLETED HOURS (EARNED HOURS) <sup>1</sup>	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

<sup>&</sup>lt;sup>1</sup>At the discretion of the appropriate school dean, imputed credit hours may be used in determining a student's academic status.

### 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 and have not attended another college; (2) have graduated and have not attended another college since graduation; (3) planning to graduate from SUNY Canton and continue in a different degree program (i.e. associate's degree to bachelor's degree).

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

# 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 "C" 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. 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 C or better from a different institution of higher learning will be evaluated for transfer credit.

#### BY PROFICIENCY EXAMINATION

- 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, both of which are administered by the College Entrance Examination Board; and the Regents College Proficiency Examination Program sponsored by the New York State Education Department.
- 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.
- 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.
- e. Such exams will be administered prior to a student's enrollment in the equivalent course for which a proficiency exam is requested.
- f. Satisfactory completion of a locally designed and administered proficiency exam will be recorded on the student's transcript following evidence of progress 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.
- 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.

### **CREDIT FOR LIFE EXPERIENCES**

Credit for Life Experiences may be granted to students enrolled in any program, at the discretion of the faculty of that program, a review committee, and the Dean of the School in which the program is located. NOTE: Students can apply for Life Experience Credit for a course only if a proficiency exam or a CLEP exam does not exist for that course. The maximum number of credit hours of Credit for Life Experiences that can be applied toward an associate degree is 15 and toward a baccalaureate degree is 30. Such credit will be evaluated according to the following procedure:

- 1. The student must apply for Life Experience Credit during the first semester of matriculation in the program. Applicants must complete the Application Form for Credit for Life Experiences 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 an 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 outline(s) in order for a request to be viable.
- The student will submit a formal letter of request and a portfolio containing all documentation and pertinent adjunct supportive material to the advisor within

- the first ten weeks of the student's first matriculated semester. The student will be notified of the decision within five weeks after submitting the portfolio. Only enrollment during the College academic year will count as the first semester of matriculation (Summer school IS NOT part of the College academic year).
- 4. The portfolio will be evaluated by the review committee, which will be comprised of the advisor, a second faculty member of the School in which the program is housed, appointed by the advisor, and an Academic Standards Committee (ASC) faculty member, appointed by the Academic Standards Committee, who is not a member of the School in which the program is housed. The ASC member of the review committee may request review of the portfolio by the entire Academic Standards Committee.
- 5. The advisor will provide the review committee with a copy of the most recent appropriate course outline(s), including detailed learning objectives.
- The review committee will submit its recommendation and the recommendation of the Academic Standards Committee, if appropriate, to the Dean of the School and forward a copy of the recommendation to the Provost.
  - a. Credit for Life Experiences cannot be granted for courses in which the applicant has been, or is, enrolled at SUNY Canton.
  - b. Credit determinations in disciplinerelated fields (e.g., electrical, humanities, social work, etc.) will be made by faculty members in the respective or related department.
- 7. Following the decision of the Dean, a notice will be forwarded to the student, the advisor, the Provost, and the Registrar regarding the amount of credit granted and the courses for which the credit will be counted in the student's program.

- 8. 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.
- 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.
- 10. Credit will be recorded as "CR" on the student's official transcript under the appropriate course number, but only following the satisfactory (2.0) 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."

### 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 are not eligible to receive financial aid until after their high school class graduates. The Early Admission Program was established to offer high school seniors an academic challenge and to jump-start their college career.

### SUNY UPSTATE MEDICAL UNIVERSITY COLLEGE OF HEALTH PROFESSIONS EARLY ADMISSION PROGRAM

The SUNY Upstate Medical University Early Admission 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: Cardiovascular Perfusion, Medical Imaging Services, Medical Technology, Nursing, Radiation Therapy Technology, Respiratory Therapy and Cardiorespiratory Sciences, and Physical Therapy DPT.

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 Admissions Program should be in the upper quartile of their class and should have competitive SAT scores. 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 Admissions 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 STU-DENT DOES NOT COMPLETE THE SUNY APPLICATION FOR UPSTATE MEDICAL UNIVERSITY. The student must contact the Office of Admissions, Upstate Medical University at Syracuse, (315) 464-4670, to request application materials specifically for the Early Admission Program. An admissions interview will be required.

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

# Ex-Offenders/ Disciplinary Dismissal from College

Potential students who are ex-offenders or have been dismissed for disciplinary reasons from a college will have their application reviewed under a policy established in accordance with section 23A of the New York State Correction Law. Copies of this policy are available from the Office of Admissions. Individuals who are ex-offenders or 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

#### 2+2 Programs

SUNY Canton has established articulation agreements with community colleges, whereby students, upon completion of an associate degree at the community college, can transfer into a SUNY Canton baccalaureate program.

ADIRONDACK COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Business Admin., AS/AAS	Finance, BBA or Management, BBA
Criminal Justice: Police Science, AAS	Criminal Investigation, BTech
Nursing	Health Care Mgmt., BTech
Radiologic Technician	Health Care Mgmt., BTech

	SUNY CANTON BACH- ELOR DEGREE
Paralegal, AAS	Legal Studies, BTech

BROOME COMM. COLLEGE	SUNY CANTON BACH- ELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, BTech
Paralegal Studies, AAS	Legal Studies, BTech

	SUNY CANTON BACH- ELOR DEGREE
Individual Studies: Sport Mgmt., AAS	Sports Management, BBA

CORNING COMM.	SUNY CANTON BACH-
COLLEGE	ELOR DEGREE
Nursing, AAS	Nursing, BS

CONCORDE CAREER COLLEGE (Aurora, CO; Kansas City, MO; Memphis, TN; Garden Grove, CA; & San Bernardino, CA; San Diego, CA)	SUNY CANTON BACHELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, B. Tech.

	SUNY CANTON BACHELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, B. Tech.

FINGER LAKES COMM.	SUNY CANTON
COLLEGE	BACHELOR DEGREE
Bus. Admin., AS/AAS	Finance, BBA or Management, BBA

FULTON- MONTGOMERY COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Bus. Admin., AS/AAS	Finance, BBA or Management, BBA
Criminal Justice, AAS	Criminal Investigation,  BTech
Electrical Tech., AAS	Electrical Tech., BTech
Liberal Arts & Sci.: General Studies	Management, BBA

GENESEE COMMUNITY COLLEGE	SUNY CANTON BACHELOR DEGREE
Veterinary Technology, AAS	Veterinary Services Management, BTech

HARPER COLLEGE	SUNY CANTON BACHELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, BTech.

HERKIMER COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Accounting, AS or Business Admin., AS/AAS	Finance , <i>BBA</i> or Management, <i>BBA</i>
International Business, AS or Marketing, AS	Management, BBA
Paralegal, AAS	Legal Studies, BTech

HUDSON VALLEY	SUNY CANTON
COMM. COLLEGE	BACHELOR DEGREE
Business Admin., AS/AAS	Finance, BBA or Management, BBA

JEFFERSON COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Accounting, AAS or Business Admin., AS/AAS	Finance, BBA or Management, BBA
Criminal Justice, AS; Fire Protection, AS; or Humanities and Social Sciences, AA	Emergency Management, BTech
EMT-Paramedic, AAS; Individual Studies, AAS; Nursing, AAS	Health Care Mgmt., BTech
Paralegal, AAS	Legal Studies, BTech
Sports Mgmt., AS	Sports Management, BBA

JOHNSON	SUNY CANTON
COLLEGE	BACHELOR DEGREE
Veterinary Sci. Tech.	Veterinary Services Mgmt., BTech

	SUNY CANTON BACHELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, BTech

	SUNY CANTON BACHELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, BTech.

	SUNY CANTON BACHELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, BTech.

NORTH COUNTRY COMMUNITY COLLEGE	SUNY CANTON BACHELOR DEGREE
Bus. Admin., AS/AAS	Management, BBA
Entrepreneurship Management, AAS	Management, BBA
Nursing, AAS	Nursing, BS

	SUNY CANTON BACHELOR DEGREE
Dental Hygiene, AS	Dental Hygiene, B. Tech.

j	SUNY CANTON BACHELOR DEGREE
Nursing, AAS	Nursing, BS

SCHENECTADY COUNTY COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Paralegal, AAS	Legal Studies, BTech

SUFFOLK COUNTY COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Nursing, AAS	Nursing, BS

TOMPKINS- CORTLAND COMM. COLLEGE	SUNY CANTON BACHELOR DEGREE
Nursing, AAS	Nursing, BS
Paralegal, AAS	Legal Studies, BTech
-	

SUNY Delhi	SUNY CANTON BACHELOR DEGREE
Veterinary Science Technology, AAS	Veterinary Services Management, <i>BTech</i>
Veterinary Science Technology, AAS	Veterinary Technology, BS

TYLER JUNIOR	SUNY CANTON
COLLEGE	BACHELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, BTech

WAYNE COUNTY COMM. COLLEGE DISTRICT (WCCCD)	SUNY CANTON BACHELOR DEGREE
Dental Hygiene, AAS	Dental Hygiene, BTech

SUNY Canton has also established articulation agreements with several four-year colleges whereby a SUNY Canton student, upon completion of the associate degree and specified courses, can transfer to a participating four-year college in a parallel program with junior-level status.

The colleges which participate with SUNY Canton in the 2+2 programs are:

COLLEGE	BACHELOR DEGREE CURRICULA
Clarkson University	Physical Therapy, DPT
Cornell University (College of Agriculture and Life Sciences)	All parallel programs
Paul Smiths College	Natural Resources: Management & Policy, <i>BS</i> ; Nat. Resources: Env. Sci., <i>BS</i> ; or Fisheries and Wildlife Sci., <i>BS</i>
SUNY Cobleskill	Child Care & Develop, BS
SUNY Institute of Technology at Utica-Rome	Nursing, BS
SUNY Morrisville	Automotive Technology, BTech
SUNY Potsdam	All parallel programs

### Examples of other colleges SUNY Canton graduates transfer to include:

- Rensselaer Polytechnic Institute
- Rochester Institute of Technology
- SUNY Binghamton
- SUNY Buffalo

Admission is not guaranteed in a 2+2 agreement. Students must meet specific criteria as outlined in the signed agreement between the two institutions, as is the case with us in receiving 1+1 candidates from community colleges. Those interested in further information regarding these programs should contact SUNY Canton's Office of Admissions.

## 1+1 Associate Degree Programs

SUNY Canton has established a variety of cooperative program agreements with other institutions of higher education.

Arrangements have been made with several community colleges whereby students take one year at the first college and the final year at SUNY Canton, from which the associate degree is granted.

A separate application must be filed for each year. For further information concerning this program, please contact the Office of Admissions.

COLLEGE	CURRICULA
Adirondack	Veterinary Sci. Tech.

# ARTICULATION AGREEMENTS WITH BOCES & CTE CENTERS

Currently, SUNY Canton has signed agreements with the following BOCES Centers. Students are encouraged to speak

to their guidance counselor to learn the specifics about the agreement for their particular program and BOCES Center. We are continuously adding to our list of participating centers, therefore, students should check with their counselor to determine whether a particular center has established an agreement since this printing.

BOCES/CTE		SUNY Canton		
Center Name Program		Curriculum	Course(s) & (Credits)	
	Animal Science I & II	Health Science Career Studies (certificate)	VAST 105 (1)	
	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)	
	Business Management & Computer Careers	Information Technology, B.Tech Or Computer Information Systems, AAS	CITA 110 (2), CITA 163 (3)	
	Computer Support Specialist/Network Systems Analyst	Information Technology (B.Tech) Or Computer Information Systems (A.A.S.)	CITA 163 (3), CITA 170 (3)	
Broome-Tioga County BOCES	Criminal Justice	Criminal Investigation, BTech; Criminal Justice, AAS; Criminal Justice Studies, Cert; CJ: Law Enforcement Leadership, BTech; or Homeland Security, BTech	JUST 101 (3) Gen Elective (3)	
	Early Childhood Education	Early Childhood, AS	ECHD 121 (3) ECHD 200 (3)	
	Health Science	Health Care Management, BTech or Health Science Career Studies, Cert	HLTH 103 (3)	
Cayuga-Onondaga BOCES	Automotive Technology I & II	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)	
	Animal Science/Veterinary Assistant	Veterinary Sci. Tech., AAS	VSCT 103 (2)	
	Auto Collision	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1), AUTO 104 (2)	
	Auto Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)	
	Digital Art & Design	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 103 (3), GMMD 201 (3)	
Champlain Valley Educational Services	Early Childhood	Early Childhood, AS	ECHD 121 (3)	
(CV-TEC)	Graphic Design & Communications	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 103 (3), GMMD 201 (3)	
	Heavy Equipment	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1), AUTO 102 (2)	
	Practical Nursing	Health Care Management, BTech; or Health Science Career Studies, Cert	HLTH 200 (3)	
	Small Gas Engines I & II	Powersports Maintenance & Repair, Cert	MSPT 101 (3)	
Cold Hollow Career Center (Vermont)	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)	

BOCES/CTE		SUNY Canton		
Center Name Program		Curriculum Course(s) & (Credits)		
	Animal Science I & II	Veterinary Science Technology, AAS; or Veterinary Technology, BS	VSCT 103 (2)	
	Art, Design & Visual Communications	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 103 (3)	
	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)	
Eastern Suffolk BOCES	Early Childhood	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)	
	Heating, Ventilation & Air Conditioning (HVAC)	Heating & Plumbing Svc., Cert	ACHP 171 (7), ACHP 172 (8)	
		or		
		Air Conditioning Maint. & Repair, Cert	ACHP 103 (7), ACHP 104 (7)	
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (3)	
	HVAC	Air Conditioning Engineering Technology, AAS Or Mechanical Engineering Technology, AAS	MECH 103 (3)	
Franklin-Essex-Hamilton BOCES	HVAC	Heating and Plumbing Service	ACHP 171 (7)	
BOCES	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)	
	Technical Health/Health Occupations	Health Care Management, BTech; or Health Science Career Studies, Cert	HLTH 200 (3)	
	Practical Nursing	Nursing, AAS	NURS 101 (6)	
Genesee Valley BOCES	Precision Machining/ Metal Trades I & II	Automotive Tech., AAS or Mechanical Eng. Tech., AAS	MECH 121 (3), MECH 222 (2)	
Greater Southern Tier BOCES (GST)	Animal Science I & II	Health Science Career Studies, Cert	VAST 105	
	Automotive Technology	Automotive Technology, AAS	AUTO 101-111	
	Nursing Assistant	Health Science Career Stud., Cert or Health Care Mgmt., BTech	HLTH 200 (3)	
Jefferson-Lewis BOCES	Criminal Justice 1 & 2	Criminal Invest., BTech; Criminal Just., AAS; Criminal Just.: Law Enforce. Leader., BTech; or Homeland Security, BTech	JUST 101 (3), Gen. Elective (3)	
	Early Childhood, AS	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)	
	Small Animal Care I & II	Health Science Career Stud., Cert	VAST 105 (1)	
	Visual Communications I & II	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 201 (3)	
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
Madison-Oneida BOCES	Information Technology Systems/CISCO Networking 1 & 2	Computer Information Systems, AAS; or Information Technology, BTech	CITA 163 (3), CITA 220 (3), CITA 221 (1)	
	Rec. and Outdoor Power Equipment	Powersport Maintenance and Repair	MSPT 101 (3)	
Nassau BOCES	Animal Care I & II or Veterinary Science I & II	Health Science Careers Stud., Cert	VAST 105 (1)	
Nassau BOCES	Graphic Communications	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 103 (3)	
	Animal Science	Health Science Career Stud., Cert.	VAST 105 (1)	
	Auto Body Repair; or Auto Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
Oneida-Herkimer- Madison BOCES	Certified Nursing Assistant	Health Science Career Stud., Cert; or Health Care Management, BTech	HLTH 200 (3)	
	Combination Welding	Automotive Technology, AAS	AUTO 104 (2)	
	Emerging Technologies: Computer Repair/Networking/Cybersecurity	Computer Information Systems, AAS; or Information Technology, BTech	CITA 163 (3), CITA 170 (3)	
	Animal Science I & II	Veterinary Science Tech, AAS or Veterinary Tech., BS	VSCT 103 (2)	
	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)	
Onondaga-Cortland-Madison BOCES	Computer Technology	Computer Information Syst., AAS or Information Tech., BTech	CITA 110 (3), CITA 170 (3)	
	Health Occupations/Nursing Aide	Health Science Career Studies, Cert; or Individual Studies - Health, AAS	HLTH 200 (3)	

BOCES/CTE		SUNY Canton		
Center Name Program		Curriculum Course(s) & (Credits)		
Oswego County BOCES	Motorsports Fabrication	Air Conditioning Eng. Tech., AAS; Automotive Tech., AAS; Mechanical Eng. Tech., AAS; Mechani- cal Tech., BTech; or Power Sports Performance & Repair, Cert.	MECH 121 (3)	
	Allied Health	Health Science Career Stud., Cert or Individual Studies- Health, AAS	HLTH 200 (3)	
	Automotive Technologies	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1),	
	Computer Business & Technology	Computer Information Syst., AAS or Information Tech., BTech	CITA 110 (3), CITA 170 (3)	
	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)	
	Environmental Technology	Alternative & Renewable Energy Syst., BTech	AREA 110 (3), SOET 116 (2)	
		Air Conditioning & Eng. Tech., AAS	SOET 116 (2)	
	Graphic Communications	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 201 (3)	
St. Lawrence-Lewis BOCES	Heating, Ventilation, AC & Refrigeration	Air Conditioning & Eng. Tech., AAS	MECH 103 (3)	
	Introduction to Criminal Justice	Criminal Investigation, BTech; Criminal Justice, AAS; or Criminal Justice: Law Enforcement Lead., BTech	JUST 101 (3)	
	Metalworking Technologies	Automotive Technology, AAS	AUTO 104 (2)	
	Pre-Engineering	Alt. & Renewable Energy, BTech; Civil & Env. Tech, BTech; Electrical Tech, BTech; Industrial Tech Mgmt, BTech; Mechanical Tech, BTech; Air Cond. Eng. Tech, AAS; Civil Eng. Tech, AAS; Elec-trical Eng. Tech., AAS; Engineering Science, AS; General Tech., AAS; or Mechanical Eng. Tech., AAS	PHYS 121 (3) PHYS 125 (1)	
Stafford Technical Center, VT	Automotive Technologies	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (1)	
Washington-Saratoga-	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)	
Warren-Hamilton-Essex BOCES	HVAC-R	Heating & Plumbing Service, Cert	ACHP 171 (7)	
	Automotive Technology	Automotive Technology, AAS	AUTO 101 (2), AUTO 111 (3)	
Wayne-Finger Lakes BOCES	Computer Technologies	Computer Information Systems, AAS; or Information Technology, BTech	CITA 170 (3), CITA 220 (3), CITA 221 (1)	
8	Manufacturing Technology	Automotive Technology, AAS; or Mechanical Engineering Technology, AAS; or Mechanical Technology, BTech	MECH 121 (3)	
	Advertising & Graphic Design	Graphic & Multimedia Design, BTech	GMMD 102 (3), GMMD 103 (3), GMMD 201 (3)	
	Automotive Technology	Automotive Tech., AAS	AUTO 101 (2), AUTO 111 (1)	
	Computer Information Systems, AAS; or Information Technology, BTech	Computer Networking & Repair/Technical Electronics (Year 1 & 2)	CITA 163 (3), CITA 170 (3)	
Western Suffolk BOCES	Early Childhood Education	Early Childhood, AS	ECHD 121 (3), ECHD 200 (3)	
	Heating/Ventilation/Air Conditioning (Year 1 & 2)	Air Conditioning Engineering Tech, AAS; or Mechanical Engineering Tech, AAS	MECH 103 (3)	
	Medical Assisting or Medical Laboratory	Health Care Management, BTech; or Health Science Career Studies, Cert	HLTH 200 (3)	
	Veterinary Assisting	Health Science Career Stud., Cert.	VAST 105 (1)	
WSWHE BOCES	Health Occupations	Health Science Career Studies, Cert.; or Individual Studies - Health (A.A.S.)	HLTH 200 (3)	

## International Partnerships

SUNY Canton provides students outside the United States with the ability to earn a bachelor's degree from the College through dual-degree programs, and path way programs. The classes are taught using SUNY Canton OnLine (SUNY Canton OL) technology. Students at these institutions earn a bachelor's degree from both their home institution and SUNY Canton. Similar to online degrees, pathway programs offer students a possiblity of transferring courses after completion of one or two years at the home institution and then, obtaining a degree from SUNY Canton. The time spent taking classes at SUNY Canton depends on the courses transferred. Additionally, SUNY Canton international programs office offers summer programs and study abroad opportunities.

Additional dual-diploma partnerships are currently under review. Please visit our website at www.canton.edu/international for updated information.

INTERNATIONAL PARTNER COLLEGE	DEGREE PROGRAM
Moscow State University, Faculty of Economics and Finance Moscow, Russia	Summer ESL and Small Business Man- agement Programs
International Institute of Health Sciences, Sri Lanka	Physical Thearapist Assistant program (Pathway 1.5+1.5)
Greenwich University, London, England	Semester, year-long and summer study abroad programs
Guangdong Women's Polytechnic College, Guangzhou, China	Summer ESL and Small Business Man- agement Programs Faculty led study abroad program

## Servicemembers Opportunity College

SUNY Canton is a member of the Servicemembers Opportunity Colleges (SOC) consortium. The college is part of a consortium of national higher education institutions which function in cooperation with the Department of Defense, the Military Services and the Coast guard to help meet the voluntary education needs of service members and their dependents.

# CONCURRENT ADMISSIONS (CON AP)

The Concurrent Admissions Program (CON AP) is conducted by colleges and universities that are members of Service-members Opportunity Colleges (SOC). 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 fouryear enlistment, the new veteran will be encouraged to enroll at SUNY Canton. This pro-gram also applies to soldiers enlisting in the Army Reserve.

Those interested in the CON AP program are encouraged to contact the SUNY Canton office of Admissions.

### Air Force Reserve Officer Training Corps (AFROTC)

#### **AEROSPACE STUDIES**

The Air Force Reserve Officer Training Corps (AFROTC) at Clarkson University, Potsdam, is offered to SUNY Canton students who can enroll through a cross registration agreement. This program allows students to accomplish their military officer training while concurrently satisfy-

ing undergraduate requirements, resulting in a commission as a second lieutenant in the United States Air Force upon graduation. Any student who has a minimum of three years left towards their baccalaureate degree, is of good moral character, is a U.S. citizen, and meets academic and physical requirements is eligible to participate with no obligation until their junior year, or if on scholarship, their sophomore year. Students who wish to take aerospace studies classes without a military service commitment are welcome to do so in a "non-cadet" status. Any student may enroll in aerospace studies courses in the same manner as other college courses. For more information, call 315-268-7989.

### THE THREE OR FOUR - YEAR PROGRAM

Students may enroll in AFROTC as freshman in either the Fall or Spring terms, or as sophomores in the Fall term. A student who enrolls as a sophomore simply doubles up on AS 100 and AS 200 classes, each a one hour a week class. All students participate in a Leadership Lab once a week along with two one-hour physical training sessions a week. The curriculum includes orientation to the military environment, USAF history, leadership and management development, international studies, problem-solving techniques, communication skills, and much more. There is no military obligation for the first two years of AFROTC unless the student has an AFROTC scholarship. After completion of the first two years, known as the general military course (GMC), the student may compete for the professional officer course (POC) during the last two years of AFROTC. If accepted, the student attends a four-week field training encampment during the summer between the sophomore and junior years before entering the POC.

### SCHOLARSHIPS/FINANCIAL SUPPORT

There are numerous merit-based scholarship opportunities offered to eligible students in any major. Amounts range from \$3,000-full tuition per year, \$900 textbook allowance per year, and a tax-free monthly stipend of \$300-\$500 depending on academic year. Scholarships may be awarded on a 2-3.5 year basis to students who are fully qualified and enrolled In the AFROTC program. A student does not have to be on scholarship to compete for a POC allocation.

For more information, contact the Air Force ROTC Admissions Officer at (315) 268-7989 or det536af@clarkson.edu.

# ARMY RESERVE OFFICER TRAINING CORPS (AROTC)

#### **MILITARY SCIENCE**

The Clarkson University Army Reserve Officers Training Corps (AROTC) is available to SUNY Canton students through cross-registration and teaches military subjects, physical conditioning, and leadership skills. 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 helicopter rappelling, crosscountry and downhill skiing and various field leadership ex-ercises. Qualified students have an opportunity to attend the Army Airborne School, Air Assault School or the Northern Warfare Training Course. AFROTC allows students maximum flexibility to include ROTC in their various courses of study. Enrollment is voluntary.

#### **BASIC COURSE**

### (Freshman and Sophomore Years)

The Basic Course provides students with sufficient military background to make informed decisions about participation in the

AROTC Advanced Course and pursuit of a military commission. Non-scholarship students in the Basic Course incur no military obligation and can withdraw at any time.

#### 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 sixweek Basic camp. At Basic Camp students earn over \$750, plus room and board. Students applying through this route normally attend Basic Camp between the sophomore and jun-ior years. This program is available to students who have at least two academic years remaining in their degree program

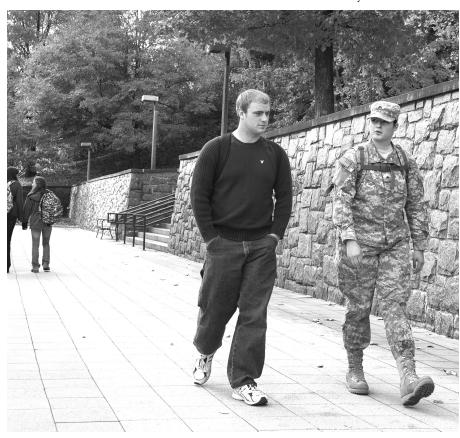
### ADVANCED COURSE (Junior and Senior Years)

The Advanced Course places increased emphasis on tactical, technical, and leadership skills to prepare students for a six-week Ad-vance Training Camp, normally held the summer between the junior and senior years, where cadets are paid at the rate of one-half a second lieutenants pay. The final year is spent on topics in military officership, and gives the students the opportunity to hold corps leadership positions.

#### **SCHOLARSHIPS**

The U.S. Army ROTC program has twoyear and three-year scholarships available to qualified students. 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 or at Basic Camp.

For more information, contact the Scholarship and Enrollment Officer at (315) 268-7705 or email armyrotc@clarkson.edu.





### Tuition and Fees

The following are estimated costs of attending SUNY Canton for 2014-15. All costs are subject to change without notice.

costs are subject to change without notice.	1st	2nd	
TUITION	SEMESTER	SEMESTER	TOTAL
NYS Resident	\$3,085.00	\$3,085.00	\$6,170.00
Out-of-State Resident (Bachelor)	7,910.00	7,910.00	15,820.00
Out-of-State Resident (Associate)	5,170.00	5,170.00	10,340.00
COMPREHENSIVE STUDENT FEE	*		
First Time Students	749.50	669.50	1,419.00
Continuing Students	669.50	669.50	1,339.00
ADDITONAL FEES			
Transcript Fee (billed each semester)	5.00	5.00	10.00
Graduation Fee (seniors only and optional)		10.00	10.00
Parking & Vehicle Registration Fee	188.60	0	188.60
(includes NYS sales tax, full year charged in Fall)			
Accident & Sickness Insurance	720.00	720.00	1,440.00
International Health Insurance(foreign students only)	610.00	855.00	1,465.00
MEALS**			
Smith, Mohawk, Heritage, Rushton (10 meals/wk & \$400 Roo Express, 14 meals/wk & \$325 Roo Express, or 19 meals/wk & \$250 Roo Express)	2,300.00	2,300.00	4,600.00
Grasse River Suites	1,650.00	1,650.00	3,300.00
Commuter Meal Plan – optional	559.00	559.00	1,118.00
HOUSING			
Smith, Mohawk, Heritage, and Rushton	Residence H	alls	
Double Room (standard)	3,350.00	3,350.00	6,700.00
Triple Room***	3,350.00	3,350.00	6,700.00
Suite Room	3,750.00	3,750.00	7,500.00
Single Room	4,950.00	4,950.00	9,900.00
Grasse River Suites	4,400.00	4,400.00	8,800.00
Grasse River Suites (double)	3,900.00	3,900.00	7,800.00
Laundry Fee	50.00	50.00	100.00

<sup>\*</sup> See description below. \*\* Resident students are required to purchase the Meal Plan.

\*\*\*Students housed in triple rooms pay the standard double room rate and are credited the prorated difference between the double rate and the triple rate three times throughout the semester. If the third roommate leaves the room the remaining occupants will no longer receive the triple 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 athletic programs.

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

**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.)

**Fitness Fee** – *(optional)* Provides unlimited use of the campus fitness center. (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 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 fourth week after school begins. Refunds will be forwarded to Higher One to whatever refund option the student has chosen with their Higher One account. Additional information for new students on the Higher One accounts will be sent prior to the start of school. Students may check their account statuses may be checked at 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 \$15 charge will be assessed to replace the card.

### ACCIDENT & SICKNESS INSURANCE

Medical insurance coverage is mandatory for full time students not covered by other insurance but OPTIONAL for part-time students. If your enrollment status changes from full-time to part-time (for any reason), you are not charged automatically for domestic health insurance. As a part-time student, you must request coverage if you want it, in writing, at the Student Service Center. All full-time students are charged for health insurance unless a waiver is submitted online to the insurance company before the end of the first week of school. Waivers must be completed each semester as part of the tuition billing process.

# TUITION/FEE REDUCTIONS DUE TO WITHDRAWAL

#### **TUITION**

Reduce as follows:

Cancellation During	Reduction
First week	100%
Second week	70%
Third week	50%
Fourth week	30%
Fifth week	0%

The first day of class session shall be considered the first day of the semester. Seven calendar days later will be deemed the end of the first week for reduction purposes. For students taking only off-campus courses with a later starting date, the refund period shall start with the first scheduled day of class.

SUNY COLLEGE FEE,
ORIENTATION FEE,
INTERNATIONAL HEALTH
INSURANCE, ALUMNI FEE,
PLACEMENT FEE, AND VEHICLE
REGISTRATION FEE

Non-refundable.

SCA ACTIVITY, PARKING, INTER-COLLEGIATE ATHLETIC, STUDENT HEALTH, RECREATIONAL FACILITIES, AND EDUCATIONAL TECHNOLOGY FEES

Reduced on the same percentage as tuition.

### ACCIDENT AND SICKNESS INSURANCE

Except for medical withdrawal due to a covered injury or sickness, any student withdrawing from school during the first 31 days of the period for which coverage is purchased shall not be covered under the policy and a full refund of the premium will be made. After such 31 days, all students will remain covered under the policy for the full period for which premium has been paid, and no refund will be allowed.

Insured persons entering the Armed Forces of any country will not be covered under the policy as of the date of such entry. A pro-rata refund of premium will be made for such person upon written request received by the company within 90 days of withdrawal from school.

#### MEAL TICKET REFUND

Refunds will only be allowed for withdrawal from school or academic dismissal. Refunds due to the removal of a student from the residence hall for either academic or disciplinary reasons is at the discretion of College Association management.

The refund will be based on the point value of the meal plan less a 15% (fifteen percent) fee for processing and administration charges when the refund is approved

and the check is drawn. The refund will be based on the official date of withdrawal or dismissal as recorded by the Student Service Center.

Students who advance register, but who do not subsequently attend the College, will receive a full refund of their entire dining meal plan payment. Transfers of funds from one student's account to that of another student are not permitted.

#### **HOUSING: RESIDENCE HALL**

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

Cancellation During	Reduction
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, drop out, 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.

- \* Federal financial aid includes Federal Pell Grant, SEOG Grant, Perkins Loan, Direct Student Loan—subsidized and unsubsidized, and the Direct PLUS Loan.
- \*\*Withdrawal Date is defined as the date the student indicated their intent to withdraw or the midpoint of the semester for a student who leaves without notifying the College.

### TIME PAYMENT PLAN

To set up monthly payments, SUNY Canton recommends the TuitionPay Plan from Sallie Mae. This plan allows you to pay the balance of your bill over a ten-month period for an academic year or five months for a semester. There is no interest just an enrollment fee of \$35/semester or \$55/full year plan. Please direct questions regarding TuitionPay to: (800) 635-0120 or sign up directly at www.tuitionpayenroll.com or use the links on our billing screens at the UCanWeb account.





### 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 85 percent of degree students 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 Student Service 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.

### STUDENT SERVICE CENTER

The Student Service Center 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:

 Provide personal assistance regarding the financial aid process to students and families on a one-toone 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 a 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 independency criteria, then federal aid eligibility is based on the student's (and spouse's, if married) prior tax year income. If a student does not meet the federal independency criteria, then his/her federal aid eligibility is based on the student's and the parent's prior tax year income. Other factors, such as assets, family size and number of family members in college figure into the federal aid eligibility.

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

Independency 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 oncampus.

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 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 January 1 in the year in which they are seeking aid: 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 www.fafsa.gov. For an electronic signature you and your parents should get a PIN a www.pin. ed.gov a few days prior to completing the FAFSA online.
- —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.

- —Students should be ready to submit signed copies of their and their parents' prior year income tax forms, if requested by the College's Student Service Center. Aid eligibility is based on the prior tax year's income. Therefore, if applying for aid for the 2014-15 year, a family may be asked for signed copies of the 2013 income tax forms.
- —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. Freshmen who meet basic requirements will have application information sent to them. All admitted students with a scholarship application will be considered for scholarship funding and contacted by the Office of Admissions or Development Office if awarded a scholarship. Recipients are typically chosen in the summer prior to the academic year. A listing of current College Foundation Scholarships is available at the end of this section. Questions concerning College Foundation Scholarships should be directed to the Development Office at (315) 386-7127 or Admissions at (315) 386-7123.
- —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 grand aid or work.

### **D**EADLINES

Application deadlines vary from program to program. Since funding from the federal government is limited for the campus-based aid programs (Federal Perkins Loan, 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 online at www.fafsa.gov by March 1st. 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 March 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). Homeschooled 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.
- 6. All male students must register with Selective Service or be exempt from doing so.
- 7. You must not have been convicted of possession or sale of illegal drugs for an offense that occurred while you were receiving federal financial aid. More information regarding this requirement is available at the Financial Aid page of www.canton.edu.

# 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 returns

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 email and letter. Awards may be accepted or declined online on their student UCanWeb account. Please read instructions and Terms & Conditions carefully.

The Student Service Center begins notifying students of aid eligibility in early March. 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. You may download and complete a **Special Conditions Form** at www.canton.edu. Click on Financial Aid, then on Forms and Worksheets. If your special circumstance involves your dependency status for the FAFSA, you may also find the Request for Independence Consideration in the same area.

# 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

The Pell Grant Program is an entitlement program. It is also a grant program, i.e., no repayment is required. Eligibility and award amount are based on need and determined by the U.S. Department of Education. 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 \$5730.00. 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.

Students must file the FAFSA to determine Pell Grant eligibility.

### FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (FSEOG)

The applicant must have financial need and be eligible for a Pell Grant. FSEOG, like PELL, is a grant program, i.e., 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 PERKINS STUDENT

Loans are offered to high-need students who are enrolled on at least a half-time basis. This is a limited fund which is awarded on a first-come, first-served basis.

The maximum amount which can be borrowed on an annual level is currently at \$2,000 for most SUNY Canton students. An undergraduate student cannot borrow more than \$9,000 total. Loans are repaid beginning nine months from the time the student ceases to be enrolled at least on a half-time basis. Students borrow at a 5% fixed interest rate and have up to ten years

to repay. Payment may be deferred for up to three years or forgiven for certain categories of borrowers. Certain jobs in law enforcement and education may qualify borrowers for partial or full cancellation of the loan debt.

All Perkins Loan recipients are required to complete an electronic promissory note before the loan can be disbursed. An exit interview is required before leaving the College so that their rights and responsibilities concerning their loan may be explained to them. Specific information may be obtained from the Student Service Center.

#### FEDERAL WORK-STUDY PROGRAM

Through the FWS Program, the College makes employment reasonably available to eligible students who have demonstrated that they are in need of financial assistance. In the event that more students are eligible for FWS than there are funds available, preference is given to students on a first-come, first-served basis. At least 7% of funds must be used for community service jobs both on and off campus.

The starting salary is usually set at minimum wage. Currently, a typical annual award is worth \$1,200 which means that the student would work approximately five-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 STAFFORD STUDENT LOAN (SUBSIDIZED)

This is a program that allows students to borrow funds from the federal government. The first step in applying for a Stafford Loan is to complete the Free Application for Federal Student Aid (FAFSA) since students applying for a Stafford Loan need proof that they have first applied for the federal PELL Grant. The College will notify the student of his/her eligibility for a Stafford Loan on the award notice. (Please note that not all students are eligible for a Subsidized Stafford 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.

A SUNY Canton student may be eligible to borrow no more than \$3,500 as a freshman and no more than \$4,500 at the sophomore level. Once full junior status is achieved in a bachelor's program you may borrow up to \$5,500/year. The interest rate is currently fixed at 4.66% as of 7/1/14. 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. Students are eligible for the interest subsidy for up to 150% of their program length. If students do not graduate within the 150% timeframe the loans become unsubsidized. 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 Stafford Loan disbursement. Both can be done online at www.studentloans.gov. Before leaving the College, all Stafford 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 Student Service Center.

# FEDERAL NON-NEED BASED LOAN PROGRAMS

### FEDERAL DIRECT STAFFORD STUDENT LOAN (UNSUBSIDIZED)

Most terms and conditions of the unsubsidized loan are the same as for the subsidized loan except that interest is a fixed 4.66% as of 7/1/14 and accrues while the student is in school. Loan limits for dependent students cover the cost of attendance minus any aid received, up to the limits of the subsidized Stafford Loan (that is, a dependent freshman cannot borrow more than \$3,500 in a combination of subsidized and unsubsidized, while a dependent sophomore cannot borrow more than \$4,500, and a dependent junior/senior cannot borrow \$5,500). An independent freshman cannot borrow more than \$7,500 between the subsidized and unsubsidized Stafford Loans. An independent sophomore cannot borrow more than \$8,500 between the subsidized and unsubsidized Stafford Loans. Independent juniors and seniors in the BT program can borrow up to \$10,500 between subsidized and unsubsidized loans. As of 7/1/08, all students are eligible for an additional \$2,000 in unsubsidized Stafford 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 7.21% beginning 7/1/14. Repayment of a DPLUS Loan begins 60 days following receipt of the loan's second disbursement. Parents may request a deferment of payments 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; 3) maintain satisfactory academic progress if currently enrolled; and 4) show compliance with applicable Selective Service requirements. The promissory note for the DPLUS can also be done online through the financial aid page of our website.

# 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

### TUITION ASSISTANCE PROGRAM GRANT (TAP GRANT)

To apply, follow the procedure detailed in "Applying for Financial Aid."

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 noncitizen, 2) be enrolled on a full-time basis (at least 12 credit hours per semester). 3) certain students may be eligible if enrolled part-time. Eligibility for TAP is based on the family's prior year New York State taxable income figure and also considers how many family members, other than the applicant, will be enrolled in college on a full-time basis.

TAP awards at SUNY Canton for the 2013-14 year ranged from \$500 to \$5,000 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 student's semester tuition is at least \$3085 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)

- —Child of Deceased Police Officer/ Firefighter/Correction Officer Awards
- Memorial Scholarships for Children of Deceased Police Officers and Firefighters

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 Native American Education Unit, New York State Education Department, Albany, NY 12230. The completed application should be forwarded to the Native American Education Unit, along with the supporting documentation required. 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 \$1,000 per year 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;
- 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.

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 Diversity 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 residents of New York State;
- —Have been accepted for enrollment or be enrolled in a degree program.

### Financial Assistance

Selection from each year's eligible applicants is made by the College Scholarship Committee in accordance with the following criteria:

- —Financial need;
- —If accepted for admission to the College, the prospective eligible student must have earned at least an 80% average for the first three and one-half years of high school;
- —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 students cumulative grade point average is lower than 2.50.

Further information concerning this program is available from the Financial Aid Office or the Development Office.

#### AID FOR PART-TIME STUDY (APTS)

This program provides tuition assistance for part-time undergraduates enrolled in degree or certificate programs in New York State. To be eligible for consideration, a student must: 1) be registered for at least 3 but less than 12 semester hours; 2) be working toward an undergraduate degree or be enrolled in a registered certificate or approved degree program; 3) be in good academic standing; 4) be a New York State resident and a U.S. citizen or eligible noncitizen; 5) have tuition charges of at least \$100 per year.

Eligibility is based on the family's prior year New York Taxable Income figure. Dependency status for the APTS program considers whether the student was eligible to be claimed as a tax exemption by his/her parents in the prior tax year.

The amount of APTS awards range from \$75 to \$400 or more per semester depending on the College's yearly allocation from the State. An award amount cannot exceed the tuition charges.

Specific questions concerning the APTS award may be directed to the Student Service Center. Funding for this program is very limited so students are encouraged to apply early. Application can be found in the Part-Time Students link on the Financial Aid page of www.canton.edu.

### CANTON COLLEGE FOUNDATION SCHOLARSHIPS AT SUNY CANTON

Most of the financial assistance available at SUNY Canton is awarded on the basis of an individual student's financial need as determined by universally applied formulas. 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. Some, once awarded, are renewable if the student's special characteristics and academic performance merit, as specified in the award.

### 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 who have completed the scholarship application will be reviewed for scholarship.

Only scholarship applicants with an 85 G.P.A. or higher will be considered.

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

Review will begin at the end of February with an aim to award the majority of scholarships by the end of March.

Applicants who have completed the scholarship form before the Priority Deadline of March 1st will be reviewed with precedence.

Applicants who achieve a 40 or higher on the Scholarship Rubric will be reviewed in priority.

Award recipients will be notified with an award letter noting the amount, outlining the stipulations to maintain the award and the number or years/semesters that the amount will be provided. The award will show up in the student's financial package.

Available scholarships and their award criteria are listed herein.

#### STATE AWARDS:

#### Presidential Scholarship

- -Awarded to a first-time students
- -\$5,000 annual value
- Minimum HS GPA of 94
- -Campus residency required
- -Renewable up to four years with GPA requirement of 3.0

#### **Excellence Scholarship**

- -Awarded to a first-time students
- -\$3,600 annual value
- -Minimum HS GPA of 92
- -Campus residency required
- -Renewable up to four years with GPA requirement of 3.0

#### Leadership Scholarship

- Awarded to a first-time students
- -\$2,500-\$3,500 annual value
- -Minimum HS GPA of 90
- -Renewable up to four years with GPA requirement of 3.0

### North Country Educational Scholarship

- -Awarded to first-time students
- -\$1,500-\$2,500 annual value
- -Minimum HS GPA of 87
- -Renewable up to four years with GPA requirement of 3.0

### Grasse River Educational Scholarship

- -Awarded to first-time students
- -\$1,000-\$2,000 annual value
- -Minimum HS GPA of 85
- -Renewable up to four years with GPA requirement of 3.0
- -Need Eligible

#### 1906 Scholarship

- -Awarded to first-time students
- -\$800-\$1,500 annual value
- -Minimum HS GPA of 85
- -Renewable up to four years with GPA requirement of 3.0
- -Need Eligible

#### Alumni Scholarship

- -Awarded to first-time students
- -\$500-\$1,000 annual value
- -Minimum HS GPA of 85
- -Renewable up to four years with GPA requirement of 3.0
- -Need Eligible

#### Transfer Merit Scholarship

- -\$1,000 annual value
- -Minimum transfer GPA of 3.0
- -Renewable up to two years with GPA maintenance of 3.0
- -Need Eligible

#### Part-Time Scholarship

- -\$75-\$200 per credit hour
- -Minimum transfer GPA of 3.0
- -Renewable up to two years with GPA maintenance of 3.0

### CANTON COLLEGE FOUNDATION SCHOLARSHIPS:

#### **AAUW Memorial Scholarship**

- —Non-traditional student, with preference to women
- -Math/Science-related field
- -2.5 or better GPA
- -Leadership potential and community service

#### Alumni Association Scholarship

- -Returning senior student
- -Minimum 3.0 GPA
- -Service to college community
- —Financial need

#### Alumni Legacy Scholarship

- -Entering freshman student
- —Child or grandchild of alumnus
- Academic potential, as demonstrated by high school performance
- —Financial need

#### Anderson-André Endowed Scholarship

- —Entering freshman 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

### Alice Westaway Bagley Endowed Scholarship

- —Nursing and allied health
- -St. Lawrence County resident

### Rachael M. and Leon E. Bagley Endowed Scholarship

- -Freshman to 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

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

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

### 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
- —This scholarship should never be used as an athletic scholarship per the request of the donor nor should it be given to a student currently receiving an athletic scholarship

### Agnes and John N. Burns Family Endowed Scholarship

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

#### Paul W. Calkins Endowed Scholarship

- —Entering freshman student
- —High school record exemplary
- —Business curriculum
- —Financial need

#### 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-Potsdam Hospital Scholarship

- —Canton-Potsdam Hospital employee in the Nursing program
- —Selected by the employer

### Carkner Construction Endowed Scholarship

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

### Preston C. Carlisle Annual Scholarship

-Student from St. Lawrence County

### The Centennial Endowed Scholarship

- -No restrictions on year or curriculum
- -Financial need may be considered

### Alden C. Chadwick Endowed Scholarship

- -Returning senior student
- —Sports Management curriculum

#### Varick A. Chittenden Book Scholarship

- -Second-year student
- -Exceptional North Country student

### Clark-Guyette Internship Assistance Program Endowment

- Students participating in non-subsidized internships
- —Preference given to St. Lawrence County students
- —Interest-free loan paid back within a five-year period

### Claxton-Hepburn Medical Center Foundation Scholarship

- —Claxton-Hepburn Medical Center employee in the Nursing program
- -Selected by the employer

### Ed and Clara Cloce Endowed Scholarship

- -Either freshman or senior
- —Demonstrates potential for success
- —Preference to Automotive curriculum or curriculum in the Canino School of Engineering Technology
- —Financial need

### Stanley Cohen Sports Management Endowed Scholarship

- —Academic achievement
- —Financial need
- -U.S. citizen

### College Association Endowed Assistantships

—Work awards given by the Financial Aid Office to students who have financial need and cannot get aid from other sources

#### College Association Management Team Scholarship

 —Annual scholarship supporting a student from the College Association Management Team

#### Dr. Solomon Cook Endowed Scholarship

- -Native American
- -Either freshman or senior
- —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
- —Active in extracurricular activities
- —Financial need

### Corning Foundation Endowed Scholarship

- -Entering freshman student
- —Electrical Engineering Technology curriculum
- —Graduate of a St. Lawrence County high school
- -Preference to women and minorities

### Criminal Justice Department Endowed Scholarship

—Students enrolled in Criminal Justice, Criminal Investigation, Law Enforcement Leadership and Management, or Homeland Security

### Gregory W. Coughlin Annual Scholarship

- -Entering freshman and returning senior
- —Physical Therapist Assistant major
- Preference given to Massena Central School or Madrid-Waddington Central School District students

### The Criminal Justice Endowed Alumni Award

- —Must be a Criminal Justice student with financial need
- —Determined by Criminal Justice department

### Cross Connection Control Foundation Scholarship

- —Entering freshman student
- —Air Conditioning Engineering Technology curriculum
- -May retain for second year

#### Evan M. Dana Endowed Scholarship

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

### Ethelyn B. Davis Endowed Scholarship

- -Returning senior student
- -Nursing curriculum

- Demonstrated compassion, thoughtfulness, concern for the patient's well-being
- —Academic achievement secondary

### Bill and Kathleen Demo and Family Endowed Scholarship

- -Entering freshman student
- -Graduate of St. Lawrence Central School
- —Accounting or Liberal Arts and Sciences: General Studies curriculum
- -Financial need

### Rosa Dixon Allied Health Endowed Scholarship

- —Freshman or senior student
- -Allied Health curriculum
- —Financial need

#### Stuart B. Dragon Endowed Scholarship

- —Entering freshman student
- —Agriculture or Business curriculum
- —First preference to Clinton County resident
- —Secondly, any North Country resident

### The Eurto Family Endowed Scholarship

 Non-traditional (over 21 years of age) student majoring in a certificate, associate, or bachelor degree program

### Professor Dr. Thomas and Virginia Duda Memorial Scholarship

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

### The 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

### 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

### George and Eileen Fay Endowed Scholarship

- —Entering freshman student
- —Graduate of Massena or Canton Central School
- High school record of good citizenship, athletic involvement, and academic achievement
- -Preference to Business curriculum

#### Linda Lahey Fay Nursing Award

- —Graduating senior student
- —Assisted fellow students/faculty members
- —Awarded at Nursing Program Pinning Ceremony

#### Financial Assistance

#### Kevin Fear '87 Endowed Scholarship

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

### Clement J. Flanagan Endowed Scholarship

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

### 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
- -Financial need

### Nicole Fleury Memorial Endowed Scholarship

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

### David A. Frary and Family Endowed Scholarship

- -Returning senior 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

- -Returning senior student
- -Service to college community
- -Financial need

#### Gerlach Family Endowed Scholarship

-Nursing student

#### Lawrence Germain Endowed Scholarship

- -Veterinary Science Technology curriculum
- —Financial need

### Gilbert, Chadwick, and Christy Investment Club Scholarship

-Business curriculum

#### John A. Goetze Endowed Scholarship

- -Returning senior student
- —Construction Engineering Technology or Engineering Science

#### Cleo J. Golding Endowed Scholarship

- —Entering freshman student
- -Meritorious academic record
- -Financial need

#### Goolden Family Endowed Scholarship

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

### 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

- Second-year student, must be in two-year curriculum
- -Non-traditional, 23 years or older
- -Must have at least a 3.0 GPA
- -Full tuition
- -Application only

### John L. Halford, Sr. Endowed 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 may be considered

### John L. Halford, Sr., and Memorial Endowed Scholarship

- Awarded to a graduate of Gouverneur Central School who is enrolled in a four-year degree program
- —Financial need may be considered

### 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

#### Henning-Keeler Endowed Scholarship

- —Students in Liberal Arts/Humanities or technical program
- -Meritorious academic record

### 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

### Dr. Harry E. Howe Endowed Scholarship

- —Returning senior student
- —Nursing curriculum
- -Minimum 3.0 GPA
- —Demonstrates Nursing professionalism

### Henry Lawrence Howe V Endowed Scholarship

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

### Harold K. Hughes Endowed Award for Ethical Behavior

- —Criminal Justice student
- —Will promote the importance of individual character and ethical behavior
- —Leadership and service in the community
- —To be awarded by Criminal Justice faculty prior to commencement

### 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

### Grace Jones-Vesper Business Scholarship

- —Second-year student
- —Business Administration curriculum
- -Must have maintained a B average
- -Preference to a non-traditional student
- -Financial need also considered

### Charles W. Johnson Endowed Scholarship

- -Entering freshman student
- —High school academic record meritorious
- —Preference accorded to Liberal Arts: General Studies/Undeclared Major who indicates an interest in majoring in the media
- —Financial need

### Betsy B. Kaplan Memorial Endowed Scholarship

- —Continuing students in Veterinary Science Technology curriculum
- -Must maintain 3.0 GPA cumulative
- —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

- —Entering freshman 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

#### Key Bank Annual Scholarship

- -Business curriculum
- -St. Lawrence County resident

#### Harry E. King Endowed Scholarship

- —Air Conditioning Engineering Technology curriculum
- —85 high school average

#### Richard C. King Endowed Scholarship

- —Returning senior student
- -Veterinary Science Technology curriculum
- —Good academic standing
- —Financial need secondary

### 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

#### 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 Krenceski Memorial Scholarship

- -Second-year student
- —Electrical Engineering Technology curriculum
- —Financial need

#### Nicole A. Lallier Scholarship

- -Entering, non-traditional student
- —Two- or four-year degree in Nursing field
- -Maintain 3.0 GPA
- —Financial need

#### 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

### 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
- -Financial need

### 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
- —Financial need secondary

### The Leadership Institute Endowed Scholarship

- —Entering freshman student
- —Graduate of a St. Lawrence County high school
- -85 high school average
- —Demonstrate leadership potential by participating in student organizations (Operation Enterprise, High School of Excellence Program, Critical Issues Conference, Boys State or Girls State)
- -Accounting/Facilities Management curriculum

### Frederick C. and Karen Liebi Endowed Scholarship

- —May be awarded to first-year or second-year student
- —Awarded to Construction majors first, then to Canino School of Engineering Technology curriculums

### C. Ernest and Dorothy B. Lowery Endowed Scholarship

- -Returning senior student
- —Demonstrate academic excellence
- -Financial need

### Albert F. and Agnes Powers Luck Endowed Scholarship

- —Entering freshman 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
- —Academic potential

### 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

- -Returning senior student
- —Outstanding scholar
- Demonstrates exemplary college or community service

### The Dale and Sharon Versace Major Scholarship

-Financial need

### Dr. Michael and Barbara Maresca Family Endowed Scholarship

- —Awarded to both an entering freshman and continuing senior 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

### David R. Maynard Endowed Scholarship

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

### Fulton and Anna McAllister Endowed Scholarship

- —Returning senior 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 Scholarship

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

#### Robert McKenty and Family Scholarship

- -Awarded annually to two students
- —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 senior 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

#### Modell Family Endowed Scholarship

- 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

#### Peter Nevaldine Endowed Scholarship

- -Entering freshman student
- Engineering Technology or one-year certificate program in Canino School of Engineering Technology
- —High academic standing
- —Participation in extracurricular activities
- -Financial need secondary
- —A 3.0 GPA is required first semester to receive the second semester award

### Allan P. and Catherine Barnett Newell Endowed Scholarship

- -Second-year 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, athletic involvement, 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 is to be considered

### 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.

### 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
- —Financial need

### E. J. Noble Guild of Canton-Potsdam Hospital Annual Nursing Scholarship

- —Second-year Nursing student
- -St. Lawrence County resident
- -Preference to non-traditional student

### Robert A. Noble, Sr., Endowed Scholarship

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

### Elsie Lucy (Cole) Norton Endowed Scholarship

- —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

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

—Financial need

### John P. Ouderkirk Endowed Scholarship

- —Returning senior student
- —Canino School of Engineering Technology
- Academic performance during freshman year at SUNY Canton meritorious
- Preference accorded to students who have grown through scouting
- -Financial need

### Dr. William F. Peters Tech Prep Endowed Scholarship

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

### Phi Theta Kappa Endowed Scholarship

- —Returning senior 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

- -Returning senior student
- -Nursing curriculum
- —Demonstrates academic excellence
- -Financial need

### 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
- —Good academic standing
- —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
- -Financial need

#### Jean M. Poticher Endowed Scholarship

- -Entering freshman student
- -Resident of St. Lawrence County
- —Good citizenship
- -Enrolled in a Business curriculum
- —Financial need

### Potsdam Hospital Guild Annual Scholarship

- -Nursing curriculum
- -St. Lawrence County resident

#### Lorence F. Pries Endowed Scholarship

- —Entering freshman student
- -Electrical Engineering Technology curriculum
- —Good academic potential
- -Participation in extracurricular activities
- —Financial need

### Bernard Creighton Regan Endowed Scholarship

- —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 student
- —Canino School of Engineering Technology
- -Preference to non-traditional student

### W. Stanley and Alice E. Richardson Endowed Scholarship

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

#### Rosser Family Annual 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
- Open to all qualified traditional or non-traditional students
- -Renewable with 3.0 GPA
- -Awarded based on merit and character

### John F. Ruitberg Endowed Scholarship

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

### The Saguaro Endowed Scholarship

—Financial need

### William and Beatrice Schermerhorn Endowed Scholarship

- —Returning senior student
- —Veterinary Science Technology curriculum
- Demonstrates a humane ethic and a personal commitment to animals

#### Gleneva Smith Gospel Choir Award

—Awarded to a member of the SUNY Canton Anointed Voices Gospel Choir

### The 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

### Bill and Peg Stalder Endowed Scholarship

- —Entering freshman student
- —Good academic potential
- -St. Lawrence County resident
- -Financial need

#### St. Lawrence Gas Scholarship

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

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

- -Returning senior student
- —Nursing curriculum
- —Empathy, leadership, patient advocacy
- -North Country resident

#### Jay F. Stone Endowed Scholarship

- —Entering freshmen student
- —Air Conditioning Engineering Technology
- -Financial need may be considered

### John H. and Eunice B. Stone Endowed Scholarship

- —Senior student
- —Preference to part-time student
- —Demonstrated 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 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
- —Financial need

### Thompson-Weatherup Family Charitable Foundation Scholarship

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

### 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
- —Financial need

### T. J. Toyota and Cloce Family Endowed Scholarship

- —Automotive Technology curriculum
- —Performance must demonstrate potential for success
- -Financial need may be a consideration

### Carl W. Trainor Family Scholarship Endowment

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

### The 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

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

—Entering student in Nursing program

#### Arlington Walker Endowed Scholarship

- -Returning senior student
- —Criminal Justice curriculum
- -Resident of St. Lawrence County

### John H. Wells Memorial Endowed Scholarship

- —Entering freshman student
- —Air Conditioning Engineering Technology curriculum
- —Second preference to Heating and Plumbing curriculum

#### Arthur S. Wheater Endowed Scholarship

- -Freshman or senior student
- -Veterinary-related curriculum
- -Preference to student from town of Oswegatchie

### 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

#### **Brad Winters Annual Scholarship**

 Entering student who is a graduate of Lisbon Central School

#### Woodcock Family Endowed Scholarship

- -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 returning senior
- —Air Conditioning Engineering Technology curriculum
- —Preference to students from St. Lawrence or Erie County
- —Financial need

### Peter and Katherine `77 Wyckoff Scholarship

- —Either entering or continuing Nursing student
- -Non-traditional student

# SATISFACTORY ACADEMIC PROGRESS

#### FEDERAL AID

(Federal Stafford Loans, Parent Loans, Perkins Loans, Work-Study, Pell Grant, Seog Grants)

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 for your degree program to determine your minimum requirements. (Transfer credits are assessed at 12 per semester)

#### Certificate Programs

SEMESTERS COMPLETED	PASSED CREDIT HRS.	CUMULATIVE GPA
1	9	1.25
2	18	1.50
3	27	1.75

#### Associate Degree Programs

SEMESTERS COMPLETED	PASSED CREDIT HRS.	CUMULATIVE GPA			
1	9	1.25			
2	18	1.50			
3	27	1.75			
4	39	2.00*			
5	51	2.00*			
6	63	2.00*			

#### **Bachelor Degree Programs**

SEMESTERS COMPLETED	PASSED CREDIT HRS.	CUMULATIVE GPA
1	9	1.25
2	18	1.50
3	27	1.75
4	39	2.00*
5	51	2.00*
6	63	2.00*
7	75	2.00*
8	90	2.00*
9	105	2.00*

\*Semester or Cumulative GPA

Academic progress requirements for part-time students will be prorated accordingly.

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 Probation & 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. NOTE: If ALL courses taken while are warning are successfully passed with a 2.0 or better you can continue on warning.

#### 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 Director. Approval is not guaranteed. If approved the student will be given an academic plan to maintain eligibility.

An Academic Suspension from the Dean's Office overrides this eligibility criteria. Suspended students are ineligible for all financial aid.

#### New York State Aid

(TAP Grant, SUSTA Grant, APTS 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. Note: Eligibility for all EOP funds is determined separately by the EOP Office.

- If you received TAP at another college, be sure to include that in the number of semesters you have received a TAP.
- To calculate the percentage of credits you have completed divide total attempted credits by total earned credits.

### 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.

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	3	0.50	50%/6 credits
2	9	0.75	50%/6 credits
3	18	1.30	75%/9 credits
4	30	2.00	75%/9 credits
5	45	2.00	100%/12 credits

### Certificate/Associate Degree Programs (Non-Remedial Students)

Semesters TAP Received	Credit	Cumulative GPA	Percentage of Credits Completed
1	6	0.50	50%/6 credits

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
2	15	0.75	50%/6 credits
3	27	1.30	75%/9 credits
4	39	2.00	75%/9 credits
5	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.

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	3	0.50	50%/6 credits
2	9	0.75	50%/6 credits
3	21	1.30	75%/9 credits
4	33	2.00	75%/9 credits
5	45	2.00	100%/12 credits
6	60	2.00	100%/12 credits
7	75	2.00	100%/12 credits
8**	90	2.00	100%/12 credits
9**	105	2.00	100%/12 credits

### Bachelor Degree Programs (Non-Remedial Students)

Semesters TAP Received	Earned Credit Hours	Cumulative GPA	Percentage of Credits Completed
1	6	0.50	50%/6 credits
2	15	0.75	50%/6 credits
3	27	1.30	75%/9 credits
4	39	2.00	75%/9 credits
5	51	2.00	100%/12 credits
6	66	2.00	100%/12 credits
7	81	2.00	100%/12 credits
8	96	2.00	100%/12 credits
9	111	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 (if over 4 prior semesters of TAP you 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).
- APTS recipients who fail to receive a 1.0 (D) in a semester will not be eligible for APTS the following semester, even if otherwise meeting progress requirements.

#### 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 Director. Approval is not guaranteed. If approved the student will be given an academic plan to maintain eligibility.

### IMPORTANT THINGS TO KEEP IN MIND

- Grades of "W" count towards total attempted hours.
- Remedial courses that are not creditbearing, will not count in the total attempted 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 Federal Aid a course that is passed may be repeated only once.

An Academic Suspension from the Dean's Office overrides this eligibility criteria. Suspended students are ineligible for all financial aid.



# 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 preregistration of new and returning students for each semester. Following advisement, continuing students schedule their classes for the subsequent semester through secure access to the online student information system. Students who do not preregister may register for courses on a space-available basis.

Course changes after the first three days of classes shall not be allowed except by petition. Extenuating circumstances should be present and the petition must be signed by the student, the instructor, the advisor or Department Chairperson and approved by the School Dean. All changes will utilize the course change notice (drop/add form).

#### MAXIMUM STUDENT LOAD

Nineteen credit hours will constitute a maximum course load per semester. Additional hours may be undertaken only with the approval of the Dean of the School in which the student is enrolled.

#### **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, faculty will state clearly the attendance policy in their course syllabus to the student. Notice of course failure may result from unexcused absenteeism/lack of participation in online courses or academic dishonesty. A grade of "F" will be recorded for a student so notified unless the student makes formal application for withdrawal from that course prior to the semester deadline for withdrawing without academic penalty, consistent with the college withdrawal policy. Forms may be obtained from School Deans' Offices or online at: www.canton.edu/registrar/withdrawal\_form.pdf. Suspension from college may be imposed by the Provost/Vice President for Academic Affairs if absenteeism has reached such proportions that further academic progress is not possible, with grades of "F" for courses not completed as of the suspension date.

#### DEVIANT ACADEMIC CONDUCT

The instructor may impose a penalty upon a student evidencing prohibited academic behavior. In those instances where cheating, plagiarism, and/or alteration of academic documents are proven, a student will be subject to a grade of "F" for the specific assignment and/or course. Similarly, a student may be dismissed from a course with a grade of "F" as a consequence of intentional disruption, obstruction or comparable class

misconduct. These consequences should be included in the class syllabus. After written notification of the charge by the instructor, students may initiate the academic student grievance procedure if they believe they have proof that the charge is unwarranted.

# 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 Credits).

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

#### **HONORS LISTS**

Honors Lists for each semester 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 (p. 53).

**President's Honors Lists** will include the names of 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 graded A to F.

**Dean's Honors Lists** will include the names of full-time students who earn semester GPA's of 3.25 or higher. To be eligible, students must be enrolled in 12 or more credit hours graded A to F.

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 graded A to F.

#### **MIDTERM GRADES**

- 1. At midterm, faculty members will submit student grades electronically for all courses they are teaching or supervising via secure access through UCanWeb, the online student information system.
- 2. Faculty members may choose to report midterm grades with the same letter grade designations used for course grades; or as S (satisfactory), which indicates a grade of C or better, or U (unsatisfactory). Students will be informed of the faculty member's methods of determining and reporting midterm grades in the course syllabus distributed at the beginning of each semester.
- 3. All mid-term grades are available to students electronically through secure access to UCanWeb. Students receiving grades of D+, D, F or U 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.

Final and mid-term grades are available to students online through secure access to UCanWeb. Final grades will only be mailed to the student's home address by special request to the Registrar's Office. Final grades may be withheld from any student who has a delinquent college obligation.

#### **INCOMPLETE GRADES**

An incomplete grade may be assigned by a faculty member in cases when, for valid extenuating circumstances (sickness, 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 within two weeks after the first day of classes in the subsequent 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.

#### 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 Student Service Center and Residence Life Office to determine the impact of this academic decision before dropping to part-time status.
- —Withdrawal from a course is accomplished by means of a Drop/Add Form available in the Deans' Offices and Registrar's website at www.canton.edu/registrar. This form must be signed by the advisor and the Dean of the School. A \$20 fee must be paid at the Student Service Center and the completed form must be delivered by the student to the Registrar's Office. The course withdrawal will not be official until the form, fully completed, is received by the Registrar.
- —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 not subject to these conditions and are not required to pay the \$20 fee.
- —A student may withdraw from a course only once under the above conditions. A subsequent withdrawal from the same course will result in an "F" (failing) grade unless there are extenuating circumstances acceptable to the Dean of the School in which the student is enrolled.
- —Signatures of the advisor, and 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 for courses dropped and will not be used in calculating GPA.
- —Students may withdraw from non-credit courses. Official notice must be given in writing by the student to the Lifelong Learning Center director. When the Director has been informed, official withdrawal will be executed with copies to the student, instructor, Registrar and Student Service Center.

#### 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. Repeated courses must be taken at SUNY Canton.

#### **TRANSCRIPTS**

A properly signed authorization by the student must precede any external distribution of a student's transcript. An official transcript will be printed on specialized transcript paper with the signature of the College Registrar. Each student will be assessed an official transcript fee of \$5 per semester, which allows students unlimited lifetime transcripts. The College reserves the right to deny transcripts to any student who is delinquent in an obligation to the College.

#### 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 from School offices or the Registrar, 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. 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 the College must obtain and sign a withdrawal form from the appropriate School Dean or Registrar's website. In the case of nonmatriculated students, the form is to be obtained from the Registrar's Office.

Matriculated students must obtain the signatures of the 1) Academic Advisor 2) School Dean, 3) Counselor (or EOP Counselor for EOP students), 4) Student Service Center Officer, and 5) Registrar.

Non-degree students must obtain signatures from the Student Service Center and Registrar.

Students may not officially withdraw from college during the last ten instructional days of a semester, exclusive of the final exam period.

The withdrawal will not be considered official until the official withdrawal date has been entered by the Registrar's Office. All signatures must be obtained and the completed form presented to the Registrar by the individual withdrawing.

#### 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 2.00 level of C 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 C or above. All General Education requirements completed during prior attendance would continue to count as requirements met, but only courses with a C 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:

- 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.
- The student will be placed on academic probation 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 Student Service Center for information on their eligibility if considering applying for Academic Forgiveness.

Students applying for Academic Forgiveness must also apply for readmission. See page 9 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. 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 1) and Basic Communication (GER 10) as well as at least three credits each in at least five of the following academic areas – natural science, social science, American history, Western Civilization, Other World Civilizations, humanities, the arts and foreign languages. (See individual baccalaureate degree requirements for exceptions to this mandate.) All students will fulfill competency outcomes in Critical Thinking and Information 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 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 AND SKILL AREAS (GER 1-10)

- 1. Mathematics
- 2. Natural Sciences
- 3. Social Sciences
- 4. American History
- 5. Western Civilization
- 6. Other World Civilizations
- 7. Humanities
- 8. The Arts
- 9. Foreign Language
- 10. Basic Communication

#### II. COMPETENCIES

- 1. Critical Thinking (Reasoning)
- 2. Information Management

# Graduation Requirements

# GRADUATION DEGREES AND CERTIFICATES

The College is authorized to grant the Bachelor of Technology (B.Tech.) degree, Bachelor of Science (BS), and the Bachelor of Business Administration (BBA) degree each requiring a minimum of 120 credit hours; four associate degrees, each requiring a minimum of 60 credit hours; and the Certificate, requiring a minimum of 30 credit hours. The associate degrees are the Associate in Applied Science (AAS), Associate in Science (AS), Associate in Arts (AA), and Associate in Occupational Studies (AOS).

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 "CR" credit only.

#### **BACCALAUREATE DEGREES**

- 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. Individual programs may have additional graduation requirements.
- 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.

#### **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. Individual programs may have additional graduation requirements.
- 2. The successful completion of the prescribed curriculum.
- 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.

6. Students matriculated in a baccalaureate program for a minimum of fifteen semester credit hours of graded coursework, 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.

#### **CERTIFICATE PROGRAMS**

- 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.
- 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.

#### **GRADUATION WITH HONORS**

Honors for the Commencement Program are based on cumulative GPA to December 31 of the year prior to commencement.

Honors GPA not less than 3.25 High Honors GPA not less than 3.50 Highest Honors GPA not less than 3.75

Upon program completion, students who have earned cumulative GPA's as

listed above will be designated for Honors, High Honors, or Highest Honors 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 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. 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 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.

# 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 enrolled for less than 12 semester hours of credit.

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

NON-MATRICULATED STUDENT: a part-time student who has not made application for nor 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 charts below) or have the approval of the Dean of the School in which the *student* is registered.

#### **Good Standing**

TO RE-REG- ISTER FOR SEMESTER	COMPLETED HOURS (EARNED HOURS) <sup>1</sup>	CUMULATIVE GPA
2	9	1.50
3	18	1.75
4	27	2.00
5	39	2.00
6	51	2.00
7	63	2.00
8	75	2.00
9	90	2.00
10	105	2.00

#### Academic Jeopardy<sup>2</sup>

TO RE-REG- ISTER FOR SEMESTER	COMPLETED HOURS (EARNED HOURS) <sup>1</sup>	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

#### **Academic Probation**

TO RE-REG- ISTER FOR SEMESTER	COMPLETED HOURS (EARNED HOURS) <sup>1</sup>	CUMULATIVE GPA
2	3-8	0.50-1.24
3	9-17	0.75-1.49
4	18-26	1.30-1.74
5	27-38	1.50-1.99
6	39-50	1.65-1.99
7	51-62	1.75-1.99
8	63-74	1.75-1.99
9	75-89	1.75-1.99
10	90-104	1.75-1.99

# The Academic Program

#### **Academic Suspension**

COMPLETED HOURS (EARNED HOURS) <sup>1</sup>	CUMULATIVE GPA		
0-2	0.49 or less		
8 or less	0.74 or less		
17 or less	1.29 or less		
26 or less	1.49 or less		
38 or less	1.64 or less		
50 or less	1.74 or less		
62 or less	1.74 or less		
74 or less	1.74 or less		
89 or less	1.74 or less		
	HOURS (EARNED HOURS) <sup>1</sup> 0-2  8 or less  17 or less  26 or less  38 or less  50 or less  62 or less  74 or less		

<sup>&</sup>lt;sup>1</sup>At the discretion of the appropriate school dean, imputed credit hours may be used in determining a student's academic status.

Any matriculated student who earns an index of 0.00 in any semester may be suspended and any matriculated student who earns an index of less than 1.50 in each of two consecutive semesters may be

suspended. Exceptions to this rule may be made by the School Dean.

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 six to twelve college credits at another college and achieve a 2.5 GPA or better and then apply for readmission to Canton after one semester has passed by writing to the Director of Admissions. Permission to reregister is not automatic and will be granted only after approval by the appropriate School Dean.

Students placed on academic probation who fail to meet all requirements of the program may be immediately suspended. Probation is a privilege and not a right: students pursuing either a certificate or associate degree may be granted a maximum of one semester of registration on academic probation, and students pursuing a baccalaureate degree may be granted a maximum of two non-sequential semesters of registration on academic probation during their academic career at SUNY Canton.

Students suspended or dismissed from the college for disciplinary reasons will receive all grades for courses completed. Suspensions or dismissals which are the result of disciplinary recommendations by the Student/Faculty Board to the President may also include grade recommendations concerning the transcript of the student for the semester in which suspension or dismissal was imposed.

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.

None of this section should be construed to give the student an absolute right to reregister at the College if the student has the appropriate cumulative index. All other college regulations concerning student behavior continue to apply, and re-registration is in no way guaranteed to any student.



<sup>&</sup>lt;sup>2</sup>Students in academic jeopardy are considered to be maintaining minimum satisfactory academic progress and are eligible to re-register.



# 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 ANGEL®. Students can virtual chat with their instructor, 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. To ensure quality, online courses undergo a vigorous course review

process before they are offered online.

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 more 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, such as Roadrunner or DSL, is preferred. Students should check the course syllabus for broadband requirements before registering for a course. Additional technical requirements include:

- Operating System (Windows 2000, XP, Vista, or Macintosh OS X)
- The latest browser available (Internet Explorer 7+, FireFox 2+)

# 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 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 Accommodative 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 Learning Network's (SLN) Help Desk at Helpdesk@sln.suny.edu. 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**

Academic support services enhance the educational opportunities for all students at SUNY Canton. For complete descriptions and current contact information, go to www.canton.edu/academic\_support\_services. All academic support services are free of charge to SUNY Canton students.

# 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 test will be notified after acceptance. SUNY Canton offers both on-site and remote testing possibilities. For details and practice test items, go to www. canton.edu/testing or call 315-386-7684.

# **DEVELOPMENTAL STUDIES**

Developmental education courses allow students 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. The developmental studies faculty works closely with students and their curriculum advisors to encourage growth in academic skills and the exploration of personal and vocational goals. Students are given the opportunity to demonstrate their potential for success in the academic environment.

# Advising and First-Year Programs

Advising and First-Year Programs helps you adjust 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.

- Planning and coordinating Orientation, including hiring of Orientation Leaders
- Coordinate the First Year Experience (FYEP 101) class and experience
- Provide information on the academic rules and resources
- Provide degree worksheets and advice on degree completion
- 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
- Referals to appropriate faculty advisors, dean's offices or other campus resources.
- Work with students on academic probation to help them return to good academic standing

# 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 per-sonal aspects of life. Space is limited so students are encouraged to apply early. The CSTEP Office is located in Ne-valdine 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 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 stu-dents. To be eligible, students must meet specific academic and financial criteria. The goal of the program is to help students suc-cessfully complete their post-secondary education and encourage them to pursue a baccalaureate degree. SSS provides a variety of sup-port 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.

# SOUTHWORTH LIBRARY LEARNING COMMONS

Southworth Library is located in the geographic center of the campus. Its services and resources are available on three levels, with the Circulation Desk, reserve

materials and textbook collection, an open-access computer lab/library instruction classroom, tutoring support services and the Information Services Help Desk on the first floor. The second level houses circulating and reference book collections, individual study carrels, group study and media-viewing rooms, current and back-issue journals and periodicals, printers, scanners and copier machines, and the Research Desk.

The facility provides space for group discussion, quiet study and intensive tutoring, including the Math and Science Learning Center, Business and Accounting Lab and the Writing Center. The computer lab provides space for information literacy instruction for classes. The library's collection includes approximately 50,000 print and 140,000 electronic books, extensive electronic databases, and a variety of digital media. Additionally, the college has access to all circulating physical materials within the SUNY system available via interlibrary loan, and SUNY Canton students, faculty and staff have borrowing privileges at all of the Associated Colleges libraries, including Clarkson, St. Lawrence University and SUNY Potsdam.

The 24/7 availability of electronic books and various databases is particularly supportive of non-resident students and online courses. For resident students, the building is equipped with wi-fi in support of mobile computing, and laptops, iPads, Kindle reading devices and other emerging technologies are available for loan as well. Ongoing innovative technology initiatives support both the learning styles and the needs of the 21st-century learner. The library also offers a highly successful, indemand reserve textbook collection, as well as a large number of anatomical models that support hands-on learning for students in the sciences and health programs.

Professional librarians are available during library hours to assist students with a full range of library services, and a web-based chat reference service provides access to professional research assistance at any time, 24 hours a day, 7 days a week.

In response to student need, the library has extended its hours of operation and is currently open 120.5 hours a week during the regular academic term, and also maintains 24-hour accessibility for final examination weeks.

# TUTORING CENTER

The Tutoring Center is part of the Southworth Library Learning Commons. The Tutoring Center is dedicated to empowering students in becoming confident and independent learners. All services are free to SUNY Canton students and available on a walk-in basis. The Center is staffed by professional and peer tutors who are qualified to assist students in meeting their academic goals and potential. In addition to the staff, a number of faculty members volunteer their time to work with students in this resource rich environment designed to support learning.

Services in the Tutoring Center include:

# MATH/SCIENCE TUTORING AND LEARNING CENTER

The Math & Science Center provides tutoring and academic support in mathematics courses, applied mathematics courses, technical courses, science courses and applied science courses offered by the college. Resources include comput-ers, printing, scanning, WiFi, anatomical models, microscopes and slides, posters, study guides, text books, calculators, work sheets and face-to-face as well as on-line support from peer and professional tutors.

#### WRITING CENTER

The Writing Center provides tutoring and academic support to students enrolled in all levels of English courses and writing intensive courses across all curriculums offered by the college. ESL assistance is also available. Resources include handouts, reference books, WiFi, printing and face-

to-face as well as on-line support from peer and professional tutors.

#### **BUSINESS & ACCOUNTING LAB**

The Business & Accounting Lab provides tutoring and academic support to students enrolled in business, account-ing, finance and economics courses offered by the campus. Resources include handouts, textbooks, WiFi, printing and face-to-face as well as on-line support from peer and professional tutors.

#### Engineering Lab

The Engineering Lab is the only tutoring lab not located in the Southworth Library Learning Commons. Located in a satellite location, this lab which is part of the Tutoring Center offers the same approach and services as the other labs. Resources include computers with internet access, printing, text books, calculators and peer and professional tutors who can offer face-to-face as well as on-line support to students.

#### GENERAL STUDIES LAB

The General Studies Lab offers students an opportunity to receive tutoring assistance in courses offered at the college that are not available in any of the above labs. In addition, this lab also offers hours during the weekend and evenings to support students who are not able to come during the day. This lab offers all of the resources listed above.

For additional information about our services, please visit us on the web at www.canton.edu/tutoring.

# ACCOMMODATIVE (DISABILITY) SERVICES

The Office of Accommodative (Disability) Services is committed to the inclusion of all students who can benefit from full access to educational advancement.

In accordance with Section 504 of the Rehabilitation Act of 1973 and Section 508

and 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. The college 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 Accommodative Services is to provide academic

accommodations for all qualified students who have documentation of a learning disability, mental health diagnosis, or a physical disability. It is the initial responsibility of the student to identify her/himself as having a disability, request accommodations, and submit complete and valid documentation of their diagnosis. The student must register with the Office of Accommodative Services in order to request and receive accommodations. Accommodations will be determined on an individual basis and based on the student's current presenting documentation. The Office of Accommodative 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 Accommodative Services and our documentation guidelines, please call (315) 386-7392 or visit us at www.canton.edu/accommodative\_services/.



# Campus Life

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, 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 oncampus 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 Grasse River Suites—are located along the Grasse River near classroom buildings, the library, 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, mirrors, floor lamps, blinds, and large closets or armoires. Cable TV is also provided. Three rooms are clustered around an adjoining bath in Heritage, Rushton, Mohawk and Smith. In Grasse River Suites, 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. Each building has a formal main lounge equipped with a TV and comfortable furniture.

#### 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, library, tutoring center, 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, the Residence Life Office undertook the challenge to bring Road Runner high-speed wired Internet access to all students residing in Heritage, Rushton, Mohawk and Smith residence halls. Grasse River Suites has wireless internet provided by Road Runner.

#### 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 Wing** – This wing 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. **Gamer** – 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 games.

Grasse River Suites – This brand new, 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.

All rooms are attractively furnished, costing you less than the average apartment per month. They come with standard room furniture and are wired for over 70 channels of cable. 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, and students living in collegeapproved 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 UCan-Web 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.

## **TELEPHONES**

All residence hall rooms are furnished with a modular jack. Calls may be received and on-campus calls may be made at any time. Those students who wish to make long distance calls may do so by obtaining a Personal Identification Number (PIN). This will allow the student access to the college network of lines for calling at discounted rates.

# HEALTH SERVICES

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 during their lifetime. The Davis Health Center is fully accredited by the Accreditation Association for Ambulatory Health Care and is staffed by a physician, nurse practitioners, and support staff. The Health Center promotes healthy life style choices as well as providing acute care for students with illnesses and injuries. Laboratory and x-ray facilities are available in Canton as well as at the hospitals in Potsdam and Ogdensburg. Referrals and consultation with medical specialists from the area are available when necessary.

All students enrolled in six or more credit hours must complete the SUNY Canton Health History and Immunization Form. This form contains all of the mandatory health requirements and can be found online at: www.canton.edu/health\_center/ forms/health\_history.pdf or in the college's admission packet. The completed form should be submitted to the Davis Health Center 30 days prior to the first day of classes. The physical exam section is optional except for students who are:

- 1. International students
- 2. Students in Nursing AAS and PN, Physical Therapist Assistant, Early Childhood Education and Dental Hygiene AAS curriculums

There are additional health requirements for students in Nursing (AAS and PN programs), Physical Therapist Assistant (PTA), Dental Hygiene (AAS), and Early Childhood, so please review the form carefully.

Note for athletes: All Students who anticipate trying out for intercollegiate athlete teams need to complete only the Athletic Pre-Participation Physical Exam Form, which can be found online at: www.canton.edu/health\_center/forms/Athletic\_Physical.pdf. This form will be used for both college health requirements and athletic clearance. Athletes will not be allowed to try out for a team or to practice with a team until the Athletic Pre-Participation Physical Exam Form is completed.

## **I**MMUNIZATIONS

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 (six or more credit hours) at SUNY Canton 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 (NYSPHL) 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 the past ten years;
   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. All of the health requirements can be located in the College's Health History and Physical Exam form found online or in the SUNY Canton admission packet.

#### INSURANCE

The College does not insure students against medical expenses which may result from an illness or accident while pursuing their activities at the College. Full-time students are mandated to have medical insurance, either under a policy held by the individual or parent, 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 Patient Protection and Affordable Care Act (PPACA).

An Insurance brochure outlining the insurance coverage is available online at:

www.canton.edu/health\_center/pdf/ insurance.pdf or at the Health Center or Student Service Center. All international students are required to purchase SUNY Medical Insurance for International Students.

# 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 underrepresented 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.

Stop in to the office or log on to www. canton.edu/career, 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 one or two Career Fairs every year. 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.

When students are ready to graduate, 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: Jobs4Roos.

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
- IBM
- Schneider Packaging Equip. Co.

- Novelis
- Canton-Potsdam Hospital
- 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.

# RECREATION AND ATHLETICS

SUNY Canton has recently expanded its athletic programs by adding five new sports teams in the past few years, including women's volleyball, men's golf, men's lacrosse, women's lacrosse, and women's ice hockey.

Other teams include men's and women's soccer, men's and women's cross country, men's and women's basketball, men's ice hock-ey, women's softball and men's baseball.

During the summer of 2012, the NCAA Division III membership committee recommended SUNY Canton for NCAA provisional status, which is a big step toward eventual full membership. SUNY Canton competes against NCAA, NAIA and USCAA competition. Teams play colleges throughout the northeast, including New York, Vermont, Maine, Pennsylvania 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. Contact and other information can be found on the official SUNY Canton athletic website (www. rooathletics.com).

#### **NEW ROOS HOUSE**

In July 2011, SUNY Canton opened its brand new \$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.

In 2008-2009, men's and women's soccer played their first full seasons on the college's new lighted synthetic turf field and baseball played its first games on their new baseball field. In the spring of 2011, a new scoreboard was added to the softball field and, in 2012, new fencing around the field.

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 new 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 AND ACTIVITIES

The Richard W. Miller Campus Center is the focal point for extra-curricular and co-curricular activities for the college community. It is part of the educational program as well as the social life of the College. The Miller Campus Center and Office of Student Activities staff encourages students to participate in social, cultural, educational and recreational activities in order to enrich their out-of-class life, to benefit their personal growth and development, and to educate them for the wise use of leisure time.

The College sponsors many clubs and activities. Student groups are easy to organize. Some 70 clubs serve academic, professional and cultural interests, and all clubs welcome students from throughout the college.

Participation in student government comes through the Student Government Association, the College Activities Board, and the Residence Hall Councils.

Students are also very involved in the design of the Paysonian yearbook. A sample of the clubs and activities:

- Diversified Ladies
- Black Student Union
- Newman Club
- Gospel Choir
- Greek Council
- Habitat for Humanity
- Karate Club
- Nursing Club
- Omega Alpha Club (commuting students)
- Outdoor Adventures Club
- Phi Theta Kappa (academic honor society)
- Paysonian Yearbook
- Auto Club

# STUDENT GOVERNMENT ASSOCIATION

The Student Government Association is the governance voice of the students and provides a means of cooperation and unity among the students, faculty 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 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 is the major entertainment and activities group for the campus, and all enrolled students are invited to participate in CAB activities. CAB is responsible for special weekends, films, coffeehouses, 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 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:

- Vehicle registration, 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.

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 at the Student Service Center between 8:30 a.m. and 4:00

p.m., Monday through Friday. Students are required to abide by all parking regulations. A copy of the regulations is issued at the time of vehicle registration.

Temporary registrations may be obtained at the University Police Department or at the Student Service Center in French Hall.

#### **CAMPUS SECURITY ACT**

SUNY Canton crime statistics filed with the United States Department of Education can be located in the Jeanne Clery Act at http://www.canton.edu/clery\_act. The Advisory Committee on Campus Security will provide upon request all campus crime statistics as reported to the United States Department of Education. 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. is a notfor-profit educational corporation whose purpose is to operate, manage, and promote services to the entire campus community in conjunction with the goals of SUNY Canton. The core services that the College Association currently provide are dining; vending; retail operations, including The Campus Store and Textbook Center; and laundry facilities. The College Association provides SUNY Canton ID's for all students, faculty, and staff. It also provides accounting and banking services for the Student Government Association. The College Association Board of Directors consists of four faculty members (selected by the Faculty Senate), three administrators (appointed by the Campus President) and four students (selected by the Student Government Association). The Board of Directors approves policies and provides oversight to management activities.

# 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.

# **C**HURCHES

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)

- 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 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

# Campus Life

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.

The Act 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. Nondirectory 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. 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 certain people by completing a FERPA waiver form.

This waiver allows SUNY Canton to share academic information from the student's education records with the persons listed on the completed form when they provide the student's SUNY Canton ID and the correct password. This form can be downloaded, completed and presented in person at the Registrar's Office, French Hall. Alternatively, the student may complete the form, have their signature notarized, and return the original, notarized form to the Registrar's Office.

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, Faculty Office Building 604, and the Office of the Registrar, French Hall 105.





# **Program Offerings**

Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

PAGE	SUNY Code	HEGIS Code	PAGE	SUNY Code	HEGIS Code
BACHELOR DEGREES			Liberal Arts and Sciences:		
Alternative and Renewable			General Studies, AA, AS94	0250	5649
Energy Systems, B. Tech56	1865	0925	Mechanical Engineering Technology, AAS95	0493	5315
Applied Psychology, BS57	1965	2099	Nursing, AAS	0622	5208.10
Civil & Environmental Technology, B. Tech58	2235	0925	Physical Therapist Assistant, AAS97	0489	5219
Criminal Investigation, <i>B. Tech.</i>	1359	2105	Veterinary Science Technology, AAS98	0521	5402
Criminal Justice:	1011	2105		_	
Law Enforcement Leadership, <i>B. Tech</i> 60	1911	2105	CERTIFICATE PROGRAM	S	
Dental Hygiene, B. Tech	0148	1213	Air Conditioning Maintenance & Repair99	1387	5317
Electrical Technology, <i>B. Tech.</i>	2234	0925	Criminal Justice Studies100	1753	5505
Emergency Management, B. Tech	1864	0599	Electrical Construction & Maintenance 101	0955	5317
Finance, BBA	0282	0504	Health Science Career Studies102	1774	5299
Funeral Services Administration, <i>B. Tech.</i>	1525	1202	Heating and Plumbing Service103	1949	5317
Graphic and Multimedia Design, B. Tech	2026	0605	Powersports Performance & Repairs104	1632	5306
Health and Fitness Promotions, B. Tech	2254	1299.3	Practical Nursing105	0938	5209.20
Health Care Management, B. Tech	0253	1202			
Homeland Security, <i>B. Tech.</i>	2335	2105	ACADEMIC MINORS		
Industrial Technology Management, B. Tech70	1935	0925	Accounting106		
Information Technology, B. Tech71	2045	0799	Applied Physics106		
Legal Studies, <i>B. Tech.</i>	0818	2199	Casino Management106		
Management, BBA73	1645	0506	Corrections		
Mechanical Technology, <i>B. Tech.</i> 74	2250	0925	Economics		
Nursing, <i>BS</i>	0291	1203.10	Environmental Technology107		
Sports Management, BBA76	0182	0599	Finance		
Veterinary Services Management, B. Tech77	1672	1202	Fraud Examination107		
Veterinary Technology, BS78	2278	1299	Homeland Security108		
			Management Information Systems108		
ASSOCIATE DEGREES			Marketing Management108		
Accounting, AAS79	0630	5002	Mathematics		
Air Conditioning Engineering			Veterinary Services Management109		
Technology, AAS80	0444	5317	Women's Studies		
Apprentice Training: Industrial Trades, AAS81	0473	5301	Writing and Communications109		
Automotive Technology, AAS82	0525	5306			
Business Administration, AAS, AS	632/067	1 5004	OTHER PROGRAMS		
Civil Engineering Technology, AAS84	0517	5309	Environmental Science & Forestry,	02501	
Computer Information Systems, AAS85	0581	5101	2+2 w/SUNY ESF, Syracuse111	0250/va	rious
Construction Technology: Management, AAS86	1162	5317	Forest Technology,  1+1 w/SUNY ESF, Wanakena111	0620/10	186
Criminal Justice, AAS87	0640	5505	Upstate Medical Univ. Early Admissions Program,	0020/10	.00
Dental Hygiene, AAS88	0545	5203	Joint admission w/SUNY Upstate		
Early Childhood, AS	1327	5503	Medical University at Syracuse111	0250	
Electrical Engineering Technology, AAS90	0699	5310	Police Academy		
Engineering Science, AS91	0530	5609			
General Technology, AAS92	2208	5301			
Individual Studies, AAS	0688	5699			
,					

# Alternative and Renewable Energy Systems—B. Tech.

The Alternative and Renewable Energy Systems (ARES) curriculum introduces students to alternative methods of energy production and principles of energy efficiency. This academic program is appropriate for students seeking careers related to the production and use of alternative energy systems. Fundamental topics such as thermodynamics, heat transfer, fluid mechanics, electricity, power generation, energy conversion and storage enable students to assess wind, solar and geothermal energy systems. Along with the technical course content, students also learn to apply project and financial management skills and address regulatory requirements. Graduates may work in technical support, systems design, sales and marketing, new product development, green energy production, or eventually consulting. Other employment opportunities exist with engineering, architectural and construction firms, particularly those incorporating green building technology.

# STUDENTS IN THIS MAJOR:

- Will be able to formulate solutions to the needs of the public for alternative and renewable sources of energy.
- Can be effective project planners and managers of alternative and renewable energy projects.
- Are prepared to respond to the dynamic needs of the alternative energy market.
- Are able to communicate in an organized manner through technical reports in written, oral, and other formats appropriate to alternative and renewable energy issues.
- Develop skills to function in and lead team-based efforts.

## CAREER OPPORTUNITIES:

The increasing desire for alternatives to fossil fuel drives the demand for graduates who are able to function and compete in this rapidly-expanding industry. Opportunities in this market include:

- Designer for an engineering firm
- Manufacturer representative
- Field manager for a contracting firm
- Contractor
- Sales representative
- Installer

## **ADMISSION REQUIREMENTS:**

Incoming students will meet all general admission requirements as freshmen to SUNY Canton, having completed the NYS Chemistry Regents Exam with 75 or above. Transfer students are evaluated individually by the program academic advisor. In addition, students must meet all requirements for Precalculus and Algebra, College Physics and College Chemistry.

## PROGRAM REQUIREMENTS:

#### (Curriculum 1865)

Semester I

Ouniester 1	Creates
AREA 110	Intro. to Alternative Energy3
ENGL 102	Oral & Written Expression3
MATH 123	Pre-Calculus Algebra4
PHYS 121	College Physics I ***3
PHYS 125	Physics Lab I1
	GER elective (3,4,5,6,7,8,9)3
	$\frac{17}{17}$
Semester II	
	Program Elective (100/200)3
MATH 161	Calculus I4
SOET 116	Intro to Computer Drafting2
PHYS 122	College Physics II ***3
PHYS 126	Physics Lab II1
	GER Elective (3,4,5,6,7,8,9)
	16
Semester III	
MATH 162	Calculus II4
ELEC 261	Electricity4

Credits

MECH 242	Fluid Mechanics       .3         Fluid Power Lab       .1         College Chemistry       .4         16
Semester IV ELEC 141 ENGS 102 ESCI 101 MATH 141	Industrial Controls
Semester V AREA 320 MECH 342	Experimentation & Meas. Lab I3 Thermodynamics3 AREA Elective3 Program Elective (300/400)3 GER Elective (3,4,5,6,7,8,9)3 15
Semester VI AREA 370	Experimentation & Meas. Lab II*3
MECH 343 BSAD 340 SOET 370	AREA Elective
Semester VI ELEC 215	I Electrical Energy Conversion4 AREA Elective
ACHP 401 SOET 361	Program Elective (300/400)
Semester VI MECH 477	Capstone Project3
CONS 350	AREA Elective
* Fulfills wri	ting intensive requirement.
	repared to take MATH 161 or higher tute a liberal arts course.
*** Students upon entry Physics I an	prepared to take MATH 161 or higher may choose PHYS131/132 University d II.
U/L = Upper	· Level Courses (300/400)
	ral Education Requirement
students n	rnative and Renewable Energy Systems nust meet seven of the ten General
Education	Requirements.

canton.edu/csoet/alt\_energy/.

MECH 241 Elad Madania

# Applied Psychology-BS

## ABOUT THIS MAJOR:

The B.S. in Applied Psychology addresses a growing need, both locally and nationwide for trained personnel to serve in human services related fields. Graduates will be prepared to work in a variety of human and social service settings - interviewing, problem solving with other professionals, and providing intervention services under professional supervision.

Students in this major will acquire knowledge and skills to work with individuals representing a diverse population. This includes children and families, the delinquent population, pregnant teenagers, homeless persons, individuals with mental disabilities and/or developmental disabilities, substance and alcohol abuse, as well as the growing elderly population. If you aspire to help others, a career in Applied Psychology can assist you in meeting this goal.

While traditional Bachelor of Arts programs in Psychology focus on research and broad psychological theory and concepts in a liberal arts context, SUNY Canton's approach emphasizes many of those theories and knowledge, but also the skills and strategies that are applied in real world field experiences.

#### CAREER READY:

Organizations are seeking individuals who have a strong background in disciplines applied to human services. While working with licensed and certified human service professionals, students will be prepared to:

- Help assess clients.
- · Assist in identifying and employing best practices in crisis interventions for clients.
- Carry out programs developed in collaboration with supervising professionals.
- Apply professional and legal standards in daily work assignments.
- Use scientific research to help develop successful intervention programs for clients.
- Employ knowledge of counseling and intervention strategies to collaboratively develop successful life programs for clients.

#### CAREER OPPORTUNITIES:

According to the U.S. Department of Labor, Bureau of Labor Statistics, employment in entry-level human services jobs is projected to grow faster than the average for all occupations, with a 54-percent increase in health care and social assistance areas.

- Human services agencies
- Social services caseworkers
- Mental disorder rehabilitation
- Residential habilitation manager
- Behavioral remediation
- Substance Abuse Services

## Admission Requirements:

- Refer to the table of high school course prerequisites for admission.
- Transfer students must have a minimum GPA of 2.5 OR a two-year degree.

# PROGRAM REQUIREMENTS:

Curriculum (1965)

Required Co	ourses Credits
ABAP 135	Parenting Knowledge and Skills3
ABAP 245	Intro. to Sci. & Tech. of Behavior3
BIOL 150	College Biology4
ENGL 101	Expository Writing <b>OR</b>
ENGL 102	Oral & Written Expression3
HUSV 100	Human Services Forum1
HUSV 201	Intro to Human Services*3
MATH 141	Statistics3
PSYC 101	Introduction to Psychology3
PSYC 220	Child Development <b>OR</b>
PSYC 225	Human Development 3
PSYC 275	Abnormal Psychology3
SOCI 101	Introduction to Sociology3
SSCI 370	Research Methods3
	Humanities (GER 7)3
	Western Civil. Elective (GER 5)3
	Math Elective (GER 1)3-4
	American History Elective (GER 4)3
	Other World Civilization (GER 6)3
	Art Elective (GER 8)3
	U/L Sociology Elective3
	3–U/L PSYC, HUSV, or ABAP9
	Foreign Language (GER 9) 3-4
	6-General Electives18
	2–U/L General Elective**6
Total Ea	rned Required Credit Hours: 121-122

Total Earned Required Credit Hours: 121-122

#### CHOOSE TRACK A OR TRACK B

TRACK A: Human Services Concentration			
Required Co	ourses Credits		
PSYC 310	Counseling Theory & Practice3		
PSYC 315	Crisis Intervention Strategies3		
PSYC 340	Social Psychology3		
PPSYC 410	Counseling Skills & Process3		
HUSV 420	Seminar in Human Services3		
HUSV 421	Practicum in Human Services3		
SSCI 181	Alcohol, Drugs and Society3		
SOCI 210	Sociology of the Family3		
SOCI 300	Race & Ethnic Relations3		
SOCI 320	Sociology of Health3		
Requirement of 30 credits			

#### TRACK B: Applied Behavior Analysis

# Concentration

	111111111111
Required C	ourses Credits
ABAP 345	App Science & Tech. of Behavior3
ABAP 375	Basic Autism ABA Methods3
ABAP 385	Adv. Science & Tech. of Behavior I3
ABAP 400	Seminar in ABA3
ABAP 401	Practicum in ABA3
ABAP 465	Class Mgt & Preventing School
	Violence3
ABAP 485	Adv. Science & Tech. of Behavior II .3
	3–U/L ABAP Electives9

Requirement of 30 credits

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Applied Psychology students must meet all of the ten General Education Requirements.

Student Learning Outcomes can be found at www. canton.edu/business/psyc/.

#### DISCLAIMER:

The completion of this baccalaureate degree will not qualify the holder to apply for, be hired for, or perform the duties related to, employment which involves the provision of services prohibited by New York State Education Law Article 153, Psychology, Paragraphs 7601 and 7601a. This prohibits graduates from SUNY Canton who hold a BS in Applied Psychology, like any other baccalaureate programs in Psychology, from performing tasks which only licensed providers are authorized to do under state law, such as providing counseling which is only to be done by licensed psychologists.

<sup>\*</sup> Fulfills writing intensive

<sup>\*\*</sup> For Group A

# Civil & Environmental Technology-B. Tech.

The Civil & Environmental Technology (C&ET) 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, geotechnology, construction and project management, surveying, and AutoCADD/REVIT drafting and BIM. Graduates have the opportunity to pursue graduate study.

## 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, problemsa 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.
- For a full list of student outcomes please visit: www.canton.edu/csoet/cet/mission. html

#### 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, Surveyor, 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, Parson, Atlantic Testing Laboratories, and Cives Steel Company.

#### CAREER OUTLOOK

- Employment opportunities for civil and environmental engineering technicians are expected to increase by 78% and 10%, through 2016 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.

## 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 2235)

Semester I	,	Credit
ENGS 101	Intro to Engineering	2
SOET 116	Intro to Computer Drafting	
MATH	Math Elective***	
PHYS 121	College Physics I	
PHYS 125	*Physics Lab I	
ENGL 102	Oral and Written Expression	
	1	15
Semester II		
CONS 172	Technical Statics	3
ENGS 102	Programming for Engineers	2
_	58	

SOET 250 MATH PHYS 122 PHYS 126	Intro 3D CADD and BIM	
Semester III CONS 101 CONS 272 CONS 280 CHEM 150 MATH	Elementary Surveying	
Semester IV CONS 322 CONS 220 CONS 336 CONS 285 MATH	Hydraulics       4         Engineering Materials       3         Structural Analysis       3         Engineering Geology       4         Math Elective***       3         17	
Semester V CONS 203 CONS 385 CONS 386	Advanced Surveying	
Semester VI CONS 387 CONS 274 SOET 370	Water and Wastewater Treatment	
Semester VI CONS 314 SOET 377		
Semester VI CONS 477 SOET 348	Capstone Project       .3         Engineering Safety       .1         GER's 3,4,5,6,7,8 or 9       .3         Program Elective **       .6	
* Fulfills writing intensive requirement.		
** Must be from approved list of program electives		

- Must be from approved list of program electives for the CET program or permission of program coordinator. One program elective must be in Structural Steel Design (CONS 324), Reinforced Concrete Design (CONS 304), or Structural Engineering Design (CONS 375).
- \*\*\* MATH = students must complete 4 Math courses. At a minimum, students must enter the program at MATH 123. If entering at MATH 123, they will complete the following sequence: MATH 123, MATH 161, MATH 162, MATH 364. If entering at MATH 161 they will complete the following: MATH 161, MATH 162, MATH 364, and a 4th Math elective of their choice with approval of their advisor or program coordinator

GER = General Education Requirement

NOTE: Civil & Environmental Technology students must meet seven of the ten and have a total of 30 credits for the General Education Requirements.

Student Learning Outcomes can be found at www. canton.edu/csoet/cet/.

# 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 will complete an internship with a major law enforcement agency 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.
- Spend an entire semester with selected criminal investigation units or complete five upper level criminal justice courses.

#### CAREER OPPORTUNITIES:

- Criminal investigation officer for police departments
- Federal law enforcement agencies
- Private investigation agencies
- Military police
- Crime Scene Technicians

## Admission Requirements:

- Students must be prepared to take Survey of Math (MATH 111) or College Algebra (MATH 121)
- 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 2.5.
 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

 Admission priority will go to SUNY Canton Criminal Justice students. A minimum grade point average of 2.5 is required.

## PROGRAM REQUIREMENTS:

#### (Curriculum 1359)

Semester I	Credits
JUST 101	Intro. to Criminal Justice3
ENGL 101	Expository Writing OR
ENGL 102	Oral and Written Expression3
MATH 111	Survey of Mathematics3
PSYC 101	Introductory Psychology3
CITA 110	Intro. to Information Technology3
	15-16
Semester II	
JUST 105	Correctional Philosophy3
JUST 110	Criminal Law3
SOCI 101	Introduction to Sociology3
	Natural Science w/Lab (GER 2)4
	Humanities Elective (GER 7)3
	16
Semester III	[
JUST 111	Criminal Procedure3
JUST 201	Critical Issues in Crim. Justice*3
JUST 209	Law Enforc. Communications3
JUST 210	Intro. to Forensic Invest3
	American History Elective (GER 4)3
	15
Semester IV	,
JUST 203	Criminal Investigations3
JUST 207	Police Services3
	Lib. Arts Elective (any GER)3
	Lib. Arts Elective (any GER)3
	Lib. Arts Elective (GER 5,6, 8,9) <u>3</u>

Semester V	
JUST 300	Forensic Photography3
JUST 303	Interviews and Interrogations3
	U/L Liberal Arts Elective3
	General Elective3
	General Elective3
	15
Semester VI	
JUST 301	Latent Prints and Impressions3
JUST 319	Professional Ethics
JUST 310	Causes of Crime OR
JUST 326	Threats to Homeland Security OR
JUST 350	Family Victimization3
1031 370	U/L Liberal Arts Elective
	General Elective3
	15
Semester VI	I
JUST 406	Crime Scene Investigation3
JUST 408	The Investigation of Death3
JUST 429	Intro. to Culminating Experience1
	U/L Program Elective3
	General Electives <u>6</u>
	16
Semester VI	II
	- ·

TICT (20 C 1 :

Students in the Criminal Investigation, B.Tech. program are required to earn a "C" or better in all JUST courses taken for credit in the program.

\* Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

**NOTE:** Criminal Investigation 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 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 stateof-the-art technology.
- Culminate their education with a semester-long internship or additional course work.
- Qualified students have the opportunity to attend the David Sullivan-St.
   Lawrence County 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:

- Jobs for graduates in law enforcement are projected to increase by 7% through 2020 according to the U.S. Department of Labor Bureau of Labor Statistics.
- 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 College level math (GER1).
- Students must be prepared to take Expository Writing (ENGL 101) or Oral and Written Expression (ENGL102).
- Students must have a high school average of at least 80.
- Transfer students must have a minimum cumulative grade point average of 2.25.

Credits

## PROGRAM REQUIREMENTS

(Curriculum 1911)

Semester I

Ouniester 1	Crear	
JUST 101	Introduction to Criminal Justice	3
BSAD 100	Intro. to Business	3
ENGL 101	Expository Writing OR	
ENGL 102	Oral and Written Expression	3
MATH 111	Survey of Math	
PSYC 101	Introduction to Psychology	3
		5
Semester II		
JUST 110	Criminal Law	3
JUST 111	Criminal Procedure	
SOCI 101	Introduction to Sociology	
30CI 101		
	Amer. History Elective (GER 4)	
	Humanities Elective (GER 7)	3
	1	5
Semester III		
CITA 110	Intro. to Information Technology	3
MATH 141	Statistics	3
	Natural Sci. w/Lab Elect. (GER 2)	4
	Lib. Arts Elective (GER 5,6,8,9)	3
	General Elective	
	·	6
Semester IV		

JUST 207 ECON 101 ECON 103 POLS 101	Police Services	
Semester V		
JUST 320	Managing Law Enforce. Training3	
JUST 333	Managing Patrol Function	
JUST 344 BSAD 301	Civil Liability Issues for CJ Admin3 Principles of Management	
SELECT O	NE COURSE3	
JUST 310	The Causes of Crime3	
JUST 317	Police Tactical Seminar3	
JUST 334	Community Oriented Policing3	
JUST 345	Comparative Justice Systems3	
Semester VI		
JUST 314	Ethics in Criminal Justice OR	
BSAD 319	Professional Ethics3	
	U/L BSAD,or JUST Elective3	
	General Elective3	
	WO COURSES6	
JUST 310	The Causes of Crime3	
JUST 317	Police Tactical Seminar3	
JUST 334 JUST 345	Community Oriented Policing3 Comparative Justice Systems3	
J031 J4)	15	
Semester VI	I	
JUST 429	Intro to Culminating Experience *1	
JUST 449	Current Issues in Law Enforce3	
JUST 335	CJ Agency Management	
BSAD 375	Leadership & Decision Making3 General Elective3	
	General Elective	
	16	
Semester VI		
JUST 430	Culminating Exper. in CJ AND/OR	
	U/L BSAD or JUST Electives 3-15	
*This	is such manying of four standards into a dimenta	
	is only required for students intending to T 430 Culminating Experience.	
**Writing In	tensive course	
U/L = Upper	r Level course (300/400)	
GER = General Education Requirement		
	minal Justice: Law Enforcement	
	p students must meet seven of the ten Education Requirements and have 30	
General Education Requirements and have 30 total General Education credits.		
NOTE: As a	of Fall 2013, all newly admitted transfers	
and fresh	men must attain a grade of 2.0 or greater	
for any JUST course to receive credit towards graduation		
0	rning Outcomes can be found at www.	
	u/sci health/lelm/	

canton.edu/sci\_health/lelm/.

JUST 201 Critical Issues in Criminal Justice \*\* .3

# Dental Hygiene-B. Tech.

The Bachelor of Technology in Dental Hygiene constitutes the final two years of a 2+2 articulation program in which the first two years entail completing an associate degree in Dental Hygiene from an accredited program. This degree provides graduates expanded career and graduate education opportunities in: administration, education, management, public health, sales, marketing, and research.

## STUDENTS IN THIS MAJOR:

- Have expanded career and graduate education opportunities.
- Will complete a one semester internship.

#### CAREER OPPORTUNITIES:

- Administration
- Education
- Management
- Pharmaceutical Sales
- Public Health
- Sales & Marketing
- Research

# Admission Requirements:

 Must have completed an associate degree in Dental Hygiene from an accredited program.

# PROGRAM REQUIREMENTS:

(Curriculum 1148)

Semester V	Credits
DHYG 350	Current Issues in Periodontics3
HSMB 304	U.S. Health Care System3
EDUC 210	Principles of Education3
MATH 111	Survey of Math (GER1) OR
	Liberal Arts Elective3
	Foreign Language or ASL (GER 9)3
	15
Semester VI	
DHYG 310	Contemporary Dental Hygiene
	Issues *3
DHYG 340	Management Communications3
HSMB 302	Legal & Ethical Issues in
	Health Care3
EDUC 300	Pedagogy & Tech of Online
	Teaching3
MATH 141	Statistics3
	15

Semester VII		
DHYG 360	Dental Hygiene Teaching	
	Methodology4	
DHYG 370	Research Methods3	
DHYG 385	Orientation to Internship1	
HSMB 330	Grant Writing Strategies2	
ENGL 301	Professional Writing &	
	Communication3	
	U/L Liberal Arts Elective	
	(GER 4, 5, 6, 7, or 8) <u>3</u>	
	$\overline{16}$	
Semester VIII		
DHYG 390	Dental Hygiene Internship6	
	Senior Seminar3	
	U/L Liberal Arts Electives	
	(GER 4, 5, 6, 7, or 8) <u>6</u>	
	$\overline{15}$	
* Fulfills writing intensive requirement.		

<sup>\*</sup>Students who have not met the pre-requisite for MATH 141 (Statistics) take MATH 111; students who have already taken Statistics or have met the pre-requisite for MATH 141 take Liberal Arts Elective.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

**NOTE:** Dental Hygiene students must meet seven out of ten General Education Requirements.

Student Learning Outcomes can be found at www. canton.edu/sci\_health/dhyg/.

# Electrical Technology-B. Tech.

The Electrical 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.

## STUDENTS IN THIS MAJOR:

- Will demonstrate the mastery of the knowledge, techniques, skills, and modern tools in Electrical Technology.
- Will have the ability to apply current knowledge and adapt to emerging applications of mathematics, science, and engineering technology.
- Develop an ability to identify, design, analyze and solve technical problems.
- · Develop an ability to communicate effectively.
- · Learn to recognize the need for, and an ability to engage in lifelong learning.
- Learn the importance of professional, ethical and social responsibilities.
- Will demonstrate respect for diversity and knowledge of contemporary professional, societal and global issues.
- Will have a commitment to quality, timeliness, and continuous improvement.
- Have the opportunity to receive minor in Mathematics.

#### CAREER OPPORTUNITIES:

- Electronics Technologist
- Biomedical Engineering Technologist
- Sale Engineering Technologist
- Service Engineering Technologist
- Systems Test Engineering Technologist
- Systems Test Engineering Technologist
- Product Engineering Technologist
- Software Engineering Technologist
- · Documentation Engineering Technologist
- Quality Control Engineering Technologist
- Applications Engineering Technologist
- R&D Technologist
- **Engineering Assistant**
- Graduate School

## Admission Requirements

- Candidates must have a minimum of a high school diploma or GED.
- Students must be prepared to take Pre-Calculus Algebra (MATH 123). 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:

Credits

#### (Curriculum 2234)

Semester I

ENGS 101	Introduction to Engineering2
ENGL 102	Oral and Written Expression3
MATH 123	Pre-Calculus Algebra4
SOET 116	Intro to CAD & Design2
ELEC 101	Electrical Circuits I3
ELEC 109	Electrical Circuits I Lab1
EEEC 10)	15
	1)
Semester II	
MECH 128	Electromechanical Technology3
ENGS 102	Programming for Engineers2
ELEC 102	Electric Circuits II3
ELEC 129	Electric Circuits II Laboratory1
MATH 161	Calculus I4
ELEC 165	Digi Fundamentals & Systems3
ELEC 166	Digi Fundamentals & Systems Lab1
	<u> </u>
Semester III	
	C.H. Pl. LOP
PHYS 121	College Physics I OR
PHYS 131	University Physics3
PHYS 125	College Physics I Laboratory1
ELEC 141	Industrial Controls2
ELEC 213	Microprocessors3
ELEC 231	Electronic Circuits4
	Elective (GER 3,4,5,6,7,8,9) <u>3</u>
	$\frac{16}{16}$

Semester IV ELEC 243 ELEC 215 ELEC 225 PHYS 122 PHYS 132 PHYS 126 MATH 162	Automated Control Systems
Semester V ELEC 332 I ELEC 343 SOET 377 MATH 364 MATH 141	ndustrial Electronics
Semester VI ELEC 380 ELEC 383 ELEC 385 SOET 348	LAN/WAN Technology
Semester VI	I
ELEC 386 ELEC 416 SOET 361	Electronic Communications II3 Microelectronics Circuit Design3 Project Management3 Program Elective3 Elective (GER 3,4,5,6,7,8,9)3 15
ELEC 386 ELEC 416	Microelectronics Circuit Design      3         Project Management      3         Program Elective      3         Elective (GER 3,4,5,6,7,8,9)
Semester VI ELEC 477 ELEC 488 SOET 370 * Fulfills write	Microelectronics Circuit Design
Semester VI ELEC 477 ELEC 477 ELEC 488 SOET 370 * Fulfills writ UL = Upper	Microelectronics Circuit Design
Semester VI ELEC 477 ELEC 488 SOET 370  * Fulfills writ UL = Upper GER = Gene Program Ele program o	Microelectronics Circuit Design
Semester VI ELEC 477 ELEC 488 SOET 370  * Fulfills writ UL = Upper GER = Gene Program Ele program el program o NOTE: Elec	Microelectronics Circuit Design

canton.edu/csoet/elec/.

—This is a new technology program; application has been submitted to ABET for accreditation of this program as an engineering technology program.

# Emergency Management-B. Tech.

The Bachelor of Technology 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 complete virtual incident command and training exercise activities, and have the opportunity to develop significant research projects or internships with emergency and disaster management agencies.

# STUDENTS IN THIS MAJOR:

- Learn about the four phases of emergency management: mitigation, preparedness, response, and recovery.
- Analyze past disasters and examine effectiveness of the current all-hazards approach to emergency management.
- Learn about natural and technological hazards, and develop hazard and vulnerability assessments.
- Study new and innovative methods for preparing communities and organizations to address the risk of emergencies, disasters, and catastrophes.
- Build leadership, communication, decision-making and problem solving skills through the development and completion of incident command system-based 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
- 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 Expository Writing (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.

Intro. to Information Technology .....3

Credits

# PROGRAM REQUIREMENTS:

#### (Curriculum 1864)

Semester I

CITA 110

ENGL 101	Expository Writing3
MATH 111	Survey of Math OR3
MATH 121	College Algebra4
PSYC 101	Introductory Psychology3
	American History (GER 4)3
	15-16
Semester II	
ACCT 101	Foundations of Financial Accounting OR
ACCT 104	Survey of Accounting4
MATH 141	Statistics3
POLS 101	Intro. Gov't and Politics OR
POLS 105	Nat'l Gov't and Politics3
	Foreign Language (GER 9)3
	Arts Elective (GER 8)3
	$\overline{16}$

Semester III EADM 201 EADM 205 SOCI 101	Fundamentals of EADM	
Semester IV EADM 220 EADM 222	Disaster Mgmt. & Preparedness3 Comm.: Preparedness & Defense3 Humanities Elective (GER 7)3 Science Elective (GER 2)3-4 West. Civilization Elect. (GER 5)	
Semester V BSAD 305 BSAD 301 BSAD 319	Public Budgeting & Fiscal Mgmt3 Principles of Management3 Professional Ethics3 U/L Program Elective3 U/L Liberal Arts Elective3 15	
Semester VI EADM 307 BSAD 310 BSAD 340	Legal Issues in E&D	
Semester VI		
BSAD 375 EADM 400 EADM 430	U/L Liberal Elective3	
	U/L Program Elective3	
Semester VIII		
EADM 435	Disaster Simulation6	
EADM 480	Internship in EADM3, 6, 9 AND/OR	
EADM 485	Senior Project AND/OR	
	U/L Program Electives9	
Upper Level Program Electives: All upper level EADM, JUST, LELM, HSMB, CONS, ECON, BSAD, SSCI, CITA courses, and/or other upper-		

level courses with permission of instructor.

\* 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

<ul> <li>North Franklin Federal Credit Unio</li> </ul>
--

- North Country Savings Bank
- MetLife

## Admission Requirements:

- Students must be prepared to take Expository Writing (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
	Accounting4
ECON 101	Macroeconomics3
CITA 110	Intro. to Information Technology3
ENGL 101	Expository Writing3
	Mathematics Elective (GER 1) 3-4
	16-17

Semester II		
ACCT 102	Foundations of Managerial	
	Accounting	3
ECON 103	Microeconomics	3
MATH 141	Statistics	3
BSAD 200	Business Communications	3
	Humanities Elective (GER 7)	3
		15
Semester III		

Semester III	
FSMA 210	Introduction to Finance3
BSAD 120	Principles of Banking3
BSAD 201	Business Law I3
	Arts Elective (GER 8)3
	General Elective3
	15

Semester I v		
BSAD 202	Business Law II	.3
FSMA 312	Financial Management	.3
	Program <sup>1</sup> Elective	.3
	Natural Sciences Elective (GER 2)	.3
	American History Flective (GFR 4)	3

Semester V	
BSAD 301	Principles of Management3
ECON 315	Global Economy3
FSMA 315	Global Investments3
BSAD 340	Management Communications *3
	Foreign Language Elective (GER 9)3
	15
Semester VI	
BSAD 319	Professional Ethics
BSAD 350	Marketing3
FSMA 415	Global Finance
FSMA 420	Financial Derivatives3
	West. Civilization Elective (GER 5)3
	$\frac{15}{15}$
Semester VI	Ī
FSMA 325	Financial Compliance & Regulation.3
FSMA 422	Risk Management3
BSAD 310	Human Resource Management3
BSAD 449	-
	Program¹ Elective U/L3
	Strategic Policies & Issues
Semester VI	
	*Finance Internship AND/OR 6-15
FSIVIA 400	*Senior Project AND/OR 3-15
	U/L Program <sup>2</sup> Electives
	15

<sup>\*</sup>Fulfills writing intensive requirement.

U/L = Upper Level Courses (300-400)

GER = General Education Requirement

**Program¹ Electives:** Courses in ACCT, BSAD, ECON, FSMA, LEST and MINS

**Program<sup>2</sup> Electives:** Courses in ACCT, BSAD, ECON, FSMA, LEST, CITA, JUST, LELM, and HSMB

NOTE: Finance students must meet all ten General Education Requirements.

Student Learning Outcomes can be found at www. canton.edu/business/fsma/.

<sup>\*\*</sup>Reminder: Prerequisite to FSMA 480 or FSMA 410 is FSMA 429 (Orientation to Culminating Experience).

# 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 raining and experience in all phases of the Funeral Service profession including embalming and funeral directing.
- 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.

#### ACCREDITATION:

The Funeral Services Administration program at the State University of New York (SUNY) at Canton, is accredited by the: American Board of Funeral Service Education (ABFSE), 3414 Ashland Avenue, Suite G, St. Joseph, Missouri 64506; (816) 233-3747; www.abfse.org

#### CAREER OPPORTUNITIES:

- Funeral Director
- Embalmer
- Funeral Home Manager/Owner
- Pre-need Funeral Counselor in a funeral home or with specialized pre-med companies
- Funeral Service After Care Specialist
- 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.

# LICENSED FUNERAL DIRECTOR PROGRAM:

Licensed Funeral directors who have already graduated and passed the National Board Examination are eligible to obtain credit for Funeral Services Administration courses through challenge exams or portfolio development. The FSAD Program will allow up to 20 credits in these types of experiential learning.

# Admission Requirements:

- Students must be eligible for enrollment in Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102).
- Students must be eligible for enrollment in Survey of Mathematics (MATH 111) or Statistics (MATH 141).
- Transfer students must have a minimum 2.0 GPA.

## PROGRAM REQUIREMENTS

#### (Curriculum 0152)

Semester I

4
3
3
3
3
16
3
3
3
3
3
15

Semester III	
ACCT 101	Foundations of Financial Acct.**4

#### Semester IV

BIOL 207	Human Anatomy4
FSAD 121	Analytical Embalming Techniques4
FSAD 129	Clinical Practicum2
FSAD 225	Professional Funeral Practice3

Liberal Arts Elective (GER 4,5,6,8) ..3

#### Semester V

FSAD 214	Funeral Home Management I	3
	General Elective	3
	U/L Liberal Arts Elective	3
	U/L General Elective	3
	$\overline{1}$	6

FSAD 211 Embalming & Asep. Tech......4

#### Semester VI

HLTH 105	Pathology**3
	Human Response to Death4
FSAD 322	Funeral Home Management II3
	U/L General Elective3
U/L Manage	ement, Social Science or Health
C	Elective)3

#### Semester VII

#### Semester VIII

FSAD 321	Advanced Embalming	4
	Mortuary Compliance	
	Internship	
	-	1/1

<sup>\*</sup> Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

—"C" or better is required in all FSAD courses and core courses. Students must take the National Board Examination to pass Mortuary Compliance (FSAD 445).

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.

<sup>\*\*</sup>Core course: covers topics directly assessed on the NRF

# Graphic and Multimedia Design-B. Tech.

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
- Iournalist

#### 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;
  - -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)

(Currentum 2020)		
Credits		
1 Intro to Media Studies3		
Intro to Drawing3		
Computer Logic3		
Expository Writing3		
Survey of Mathematics3		
OR		
College Algebra4		
15-16		
2Intro to Design3		
Intro to Programming3		
Creative Non-Fiction3		
Acting and Improvisation OR		
Introduction to Speech3		
Introduction to Sociology <u>3</u>		
15		
Digital Photography3		
Art History BCE to 16th Century **		
OR		
Art History 16th-20th Centuries **		
OR		
Art and Society3		
Creative Writing3		
Foreign Language (GER 9)3		
Natural Science (GER 2)3-4		
15-16		
1 Film Analysis3		
Sociology of Mass Media3		

American History (GER 4)
Semester V           GMMD 3013-D Design
Semester VI GMMD 302 Digital Photojournalism OR GMMD 303 Experimental Digital Photography3 GMMD 330 Web Design and Development3 GMMD 331 Digital Illustration and Typography3 ENGL 301 Professional Writing
Semester VII GMMD 401 Multimedia Product Design
Semester VIII         3           GMMD 432 Virtual Worlds         3           U/L Elective         3           SELECT ONE OR TWO COURSES         8           GMMD 441 Group Project         4
GMMD 442Individual Project
**Art History (ARTS 201/202) can be counted as either GER 7 or GER 8; this elective should be used to cover the remaining General Education area.  U/L = Upper Level Courses (300/400)  GER = General Education Requirement  NOTE: Graphic and Multimedia Design students must meet all of the ten General
Education Requirements.  Student Learning Outcomes can be found at www.

canton.edu/csoet/gmmd/gmmd/html.

# Health & Fitness Promotion—B. Tech.

Health and Fitness Promotion is a 2+2 program that provides advanced education in the area of health and fitness for students who have completed an associate's degree with a science and health emphasis. There are two possible program "tracks": The science track is intended for those students who wish to pursue employment in settings that promote health and wellness including fitness centers, corporate fitness facilities, as personal trainers, strength and conditioning specialists; the business track will provide fundamental courses in business and management which will prepare students for business ownership or management positions within health and fitness organizations. The Health and Fitness Promotion degree may also serve the purpose of providing a means for students who wish to pursue graduate studies in a similar field. As an example, the program would allow the physical therapist assistant to "bridge the gap" between the associates degree and the doctor of physical therapy (DPT) degree. Students in either track will be able to choose from specialized electives with an emphasis on exercise and sports.

SUNY Canton offers two Associate Degrees, PTA and Liberal Arts and Sciences General Studies, that can lead to enrollment into the Health & Fitness Promotion program.

#### 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, with athletic teams, and community and health organizations.
- According to the U.S. Bureau of Labor Statistics, jobs for fitness workers are expected to grow 27 percent through 2016.

#### Transfer Opportunities:

• Doctor of Physical Therapy (DPT) programs

• Masters of Exercise Science

## Admission Requirements:

- · AAS, AS, or AA degree in an area that emphasizes health and fitness (i.e. PTA), which includes a minimum of 5 credit hours of health/fitness related coursework.
- Successful completion of the following courses or equivalent: Human Anatomy and Physiology I & II (equivalent of BIOL 217/218); English Composition (GER 10); Introductory Psychology (GER 3); Human Development or Life Span Psychology (equivalent of PSYC 225); Kinesiology; Math (GER 1); and Introduction to Business (business track only).

## PROGRAM REQUIREMENTS:

(Curriculum 2254)

#### SCIENCE TRACK:

Semester V CHEM 150 HEFI 301 MATH 141 PHYS 121 PHYS 125	Credits           College Chemistry I
Semester VI	
CHEM 155	College Chemistry II4
HEFI 302	Health & Wellness Across the Lifespan3
HEFI 303	Exercise Physiology3
PHYS 122	College Physics II
PHYS 126	College Physics II Lab1
	U/L Liberal Arts Elective
	(GER 4,5,6,7 or 8) <u>3</u>
Semester VI	I
HEFI 401	Fitness Assessment & Exercise
	Prescription4
HEFI 406	Orientation to Internship1
HSMB 330	Grant Writing Strategies2
	U/L Liberal Arts Elective
	(GER 4,5,6,7 or 8)3
	U/L Program Elective3
	U/L Program Elective3  16

Semester VI	III
HEFI 405	Current Issues in Health & Fitness*3
HEFI 407	Health Fitness Intern. AND/OR . 3-9
	U/L Program Electives3-6
	U/L General Elective3
	12.15

BSAD 200 Business Communications......3

BSAD 215 Small Business Mgmt ......3

Credits

#### **BUSINESS TRACK:**

Semester V

HEFI 301	Health & Wellness Promotion3
MATH 141	Statistics3
	U/L Liberal Arts Elective
	(GER 4,5,6,7 or 8) <u>3</u>
	15
Semester VI	
BSAD 301	Principles of Management3
HEFI 302	Health & Wellness Across Lifespan3
HEFI 303	Exercise Physiology3
SPMT 306	Sports Operations and Facilities
	Management3
	U/L Liberal Arts Elective
	(GER 4,5,6,7 or 8)3
	15

Semester	VII
----------	-----

HEFI 401	Fitness Assessment & Exercise	
	Prescription	4
HEFI 406	Orientation to Internship	1
HSMB 330	Grant Writing Strategies	2
	U/L Liberal Arts Elective	
	(GER 4,5,6,7 or 8)	3
	U/L Program Elective	3
	U/L Program Elective	
	C	16

#### Semester VIII

BSAD 340	Management Communications3
HEFI 405	Current Issues in Health & Fitness*3
HEFI 407	Health Fitness Intern. AND/OR . 3-9
	U/L Program Electives 3-6
	12-15

\* Fulfills writing intensive requirement.

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

Program Electives: HEFI 310 Advanced Care and Prevention of Athletic Injuries, HEFI 320/PSYC 320 Psychology of Health and Fitness, HEFI 370/SSCI 370 Occupational Health & Safety, HEFI 402 Strength and Conditioning, HEFI 403 Community Wellness, HSMB 303 Occupational Health & Safety.

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. Tech.

Health Care Management is a Bachelor of Technology degree, which includes study in health, science, business and management. Individuals will be prepared to enter public and private service 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 a 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 possibilities in the last semester of study.
- Will have a diverse background in health, health sciences, health care management and business management upon completion of the program.
- · With degrees in Nursing, Medical Laboratory Technician, Occupational Therapy Assistant, or Physical Therapist Assistant, students can transfer the courses in their major for the health core courses.

# CAREER OPPORTUNITIES:

- · Upward mobility in management of allied health fields
- Public and private service careers
- Insurance industry
- Research in public health on county, state and federal levels
- Private industry
- Business sector jobs in administration within industry, education, government as well as health care
- Government management positions in Emergency Management, FEMA and Homeland Security at the county, state and federal levels l

## Admission Requirements:

- Students must be prepared to take Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102).
- 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.
- In order 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 with a minimum grade of C may be accepted to permit advanced standing.
- In order to maintain junior and senior level status and to advance to the final semester, all students must maintain a GPA of 2.0.
- In order to advance to the final semester and begin an internship, all students must obtain a passing grade in Health Services Management Internship Orientation (HSMB 308).
- In order to graduate, all students must successfully complete an Internship (HSMB 408) and/or an Internship Alternative and Senior Seminar (HSMB 410).

Credits

#### (Curriculum 0253)

Semester I

O TILLED COL I		Oretreo
HSMB 101	Intro. to Health Services Mgm	t4
ENGL 101	Expository Writing OR	
ENGL 102	Oral and Written Expression	3
	Natural Science (GER 2)	3-4
PSYC 101	Introductory Psychology	3
CITA 110	Intro. to Information Tech	3
FYEP 101	First Year Experience	1
		16-17
Semester II		
MATH 111	Survey of Math OR	
MATH 141	Statistics	3
PSYC 225	Human Development	3
ECON 101		
	General Elective (GER 1)	3
	GER Elective (GER 4,6,8)	3
	General Elective	3
		15

Semester III ACCT 101 HLTH 200 HSMB 200 BSAD 201	Foundations of Financial Acct	
Semester IV ACCT 102 FSMA 210	Foundations of Managerial Acct	
Semester V HSMB 340 HSMB 301 BSAD 301 HSMB 306	Management Communications	
Semester VI BSAD 340 BSAD 310 HSMB 307	Management Communications3 Program Elective3 Human Resource Management3 Health Care Facility Admin3 U/L Liberal Arts Elective3 15	
Semester VI HSMB 302 HSMB 305 BSAD 350 HSMB 308	I Legal and Ethical Issues in Health.*3 Managed Care	
Semester VI HSMB 410 HSMB 408		
* Writing Intensive  U/L = Upper Level Courses (300/400)  GER = General Education Requirement  1 Pending State Approval  2 Internship alternative consists of 3-12 credits of  U/L Program Electives  Program Electives: ACCT, BIOL, BSAD, CHEM,  CITA, DHYG, ECON, FSAD, FSMA, HEFI,		
HLTH, LEST, MINS, NURS, PHTA, VSCT. Program must meet 7 of 10 General Education Requirements (including 1, 2, 3 & 10) and 30 total Liberal Arts credits		

Student Learning Outcomes can be found at www. canton.edu/business/health\_care/

# 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
- Private Sector Security
- 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

#### Admission Requirements:

Admission to the Bachelor of Technology in Homeland Security is competitive.

- Students must be prepared to take College Algebra (MATH 121)
- 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 2.5.
   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
MATH 111	Survey of Mathematics OR
MATH 121	College Algebra

 Admission priority will go to SUNY Canton Criminal Justice students. A minimum grade point average of 2.5 is required.

JUST 101 Introduction to Criminal Justice......3

Credits

#### PROGRAM REQUIREMENTS

ENGL 101 Expository Writing OR

#### (Curriculum 2335):

Semester I

ENGL 102	Oral and Written Expression3
MATH 111	Survey of Mathematics*3
PSYC 101	Introduction to Psychology3
CITA 110	Intro to Information Technology3
	15
Semester II	
JUST 105	Correctional Philosophy3
JUST 110	Criminal Law3
SOCI 101	Introduction to Sociology3
	Natural Science w/ Lab (GER 2)4
	Humanities Elective (GER 7)3
	16
Semester III	
TI TOTE 1 1 1	
JUST 111	Criminal Procedure3
JUST 111 JUST 201	Criminal Procedure
-	
JUST 201	Critical Issues in Criminal Justice ** .3
JUST 201	Critical Issues in Criminal Justice ** .3 Law Enforcement Communications .3
JUST 201	Critical Issues in Criminal Justice ** .3 Law Enforcement Communications .3 Liberal Arts Elective
JUST 201	Critical Issues in Criminal Justice ** .3 Law Enforcement Communications .3 Liberal Arts Elective (GER 5,6,7,8,9)

JUST 230	Fundamentals of Homeland Security 3 Program Elective
Semester V JUST 303	Investigative Interviews OR U/L Program Elective3
JUST 326	Threats to Homeland Security3
JUST 375	Terrorism Through the Ages3
	Program Elective3
	General Elective <u>3</u>
Semester VI	
JUST 314	Ethics in Criminal Justice3
LEST 375	Immigration Law & Border Control 3
JUST 355	Public Safety Incident Response3
	U/L Program Elective3
	General Elective3
0 177	15
Semester VI	
JUST 380	Civil Liberties & Homeland Security3
JUST 415	Emerging Issues in
	Homeland Security3
JUST 420	Corportate Role in
HICT 425	Homeland Security3
JUST 425	Law Enforcement Intelligence
JUST 429	Systems in Homeland Security3 Intro. to Culminating Experience1
JUST 429	General Elective3
	16
Semester VI	
JUST 430	Culminating Experience in
J001 100	Criminal Justice OR
	(5) U/L JUST Electives15
	$\frac{15}{15}$
Students in t	he Homeland Security, B. Tech.
program ai	re required to earn a C or better in all
	rses taken for credit in the program.
	6 cannot be used as a General Elective
-	tensive course.
	Level Courses (300/400)
GER=Genera	ıl Education Requirement
of the ten	neland Security students must meet seven General Education Requirements and otal GER credits.
nuve 30 to	om Gertiems.

Student Learning Outcomes can be found at www.

canton.edu/sci\_health/home/.

Semester IV

# 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
- Sales

## Admission Requirements:

Incoming students will meet all general 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 2.5.

## PROGRAM REQUIREMENTS:

#### (Curriculum 0935)

Semester I	Credits
ENGL 101	Expository Writing OR
ENGL 102	Oral and Written Expression3
MATH 123	Pre-Calculus4
SOET 116	Introduction to CADD2
PHYS 121	College Physics I3
PHYS 125	Physics Lab I1
	Program Elective <u>3</u>
	16
Semester II	
ACCT 101	Foundations of Financial Accounting OR
ACCT 104	Survey of Accounting4
MATH 161	Calculus I4
PHYS 122	College Physics II3
PHYS 126	Physics Lab II1
	Program Electives3
	Program Electives3
	18
Semester III	
ECON 103	Microeconomics OR
ECON 101	Macroeconomics3
MATH 141	Statistics OR
MECH 251	Quality Control3
	Program Electives
	Program Electives
	GER (4, 5, 6, 7, 8, 9)3
	15
Semester IV	
BSAD 201	Business Law I3
D3/1D 201	Program Electives
	Program Electives
	GER (4, 5, 6, 7, 8, 9)3
	GER (4, 5, 6, 7, 8, 9)
	15
	1)

Semester V BSAD 340 BSAD 355 SOET 361	Management Communications*3  Management of Technology3  Project Management3  Program Electives3  Program Electives3  15	
Semester VI		
BSAD 301	Principles of Management3	
SOET 370	Engineering Project Analysis3	
	Program Electives3	
	Program Electives3	
	U/L Liberal Arts/Science <u>3</u>	
	15	
Semester VI	I	
BSAD 449	Management Policies3	
SOET 377	Engineering Technology Issues1	
SOET 430	Systems Analysis3	
	Program Electives3	
	Program Electives3	
	U/L Liberal Arts/Science <u>3</u>	
	16	
Semester VI	II	
SOET 348	Engineering Safety1	
SOET 477	Engineering Technology Capstone	
	Project3	
	General Elective3	
	Program Electives3	
	Program Electives <u>3</u>	
	13	
* Fulfills writing intensive requirement.		
$L/L = Upper\ Level\ Courses\ (100/200).$		

 $L/L = Upper\ Level\ Courses\ (100/200).$ 

U/L = Upper Level Courses (300/400).

GER = General Education Requirement.

**Program Electives:** Any course from the Canino School of Engineering Technology, or the Business Department.

All Program Elective courses presented for graduation must have at least a grade of "C" (or transfer credit).

NOTE: Industrial Technology Management students must meet seven of the ten General Education Requirements. Four of the GERs (GER 1, 2, 3, and 10) are met with existing curriculum course requirements. The remaining three GERs must be met by selecting one course each in three of the following six areas: American History (GER 4); Western Civilization (GER 5); Other World Cultures (GER 6); Humanities (GER 7); The Arts (GER 8); Foreign Language (GER 9).

**Student Learning Outcomes** can be found at www. canton.edu/csoet/itm/.

# Information Technology-B. Tech.

The Information Technology (IT) curriculum introduces the student to computer systems, networks, and communications. This academic program is appropriate for students seeking careers in information technology including network administration, operations, systems design, troubleshooting and management. Students have the opportunity to learn systems analysis and design, information management, security implementation, web administration and commerce, and programming.

# 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 computer hardware, networking, database management, web development, security implementation, and IT applications.
- Will complete a Capstone Project and may take an internship.

#### CAREER OPPORTUNITIES:

- System Analyst
- IT Consultant
- Network Administrator
- Database Manager
- Web Master
- IT Security Specialist
- IT Position in any industry

#### POTENTIAL EMPLOYERS:

- IT Companies
- Health Management Services
- Financial Services
- Government
- Education
- Military
- IT Departments in any industry

## Admission Requirements:

• Students must be qualified to enter at

least College Al	gebra (MAT	H 121) and
Oral and Writ	ten Expressi	on (ENGL
102).		

- Chemistry or Physics courses are recommended.
- Computer or technology courses are strongly recommended.
- Transfers into this program must have a 2.5 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 2045)

Semester I	Credits
BSAD 100	Introduction to Business3
CITA 163	Survey of Information Tech3
CITA 152	Computer Logic3
ENGL 102	Oral and Written Expression <sup>1</sup> 3
	Mathematics Elective3
	15
Semester II	
CITA 170	Computer Concepts & Oper. Sys3
CITA 171	Oper. Sys. Use & Administration3
MATH 141	Statistics
	Accounting <sup>2</sup> 4
	GER Course3
	$\overline{16}$
Semester III	
CITA 180	Introduction to Programming4
CITA 215	Database Concepts & Apps3
CITA 220	Data Comm & Network Tech3
CITA 221	Data Comm & Network Tech Lab1
	Economics <sup>3</sup> 3
	Program Elective <sup>4</sup> 3
	17
Semester IV	
CITA 204	Systems Analysis and Design **3
CITA 250	Information Security3
22/0	GER Course3
	Program Elective <sup>4</sup>

Semester VI	
CITA 330	Emerging IT Applications3
CITA 400	Quantitative Approaches to Mgmt3
SOET 370	Engineering Project Analysis3
	GER Course3
	Program Electives <sup>4</sup> 3
	Program Electives <sup>4</sup> <u>3</u>
	$\overline{18}$
Semester VI	I
	Program Electives <sup>4</sup> 3
	Program Electives <sup>4</sup> 3
	U/L Liberal Arts/Science3
	GER Course3
	General Elective3
	15
Semester VI	II
CITA 460	IT & Networked Economy3
SOET 477	Capstone Project3
CITA 480	Internship in IT OR
	2–Program Electives <sup>4</sup> <u>6</u>
	12
* Pending Sta	ite Education Department approval.
** Fulfills wr	iting intensive requirement.

Compostor VI

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

Students in this program must take at least 45 upper level credits (course numbers 300/400) and a minimum of 30 Liberal Arts credits.

<sup>1</sup>ENGL 101 Expository Writing may be taken in place of ENGL 102 Oral and Written Expression.

<sup>2</sup>Accounting: ACCT 104 Survey of Accounting recommended. Students interested in further course work in accounting or in business should take ACCT101 Foundations of Financial Accounting.

<sup>3</sup>Economics: ECON 101 Macroeconomics or ECON 103 Microeconomics recommended.

<sup>4</sup>Program Elective: Any course from the Canino School of Engineering Technology, or the Business Department (including ACCT 102 Foundations of Managerial Accounting).

NOTE: Information Technology students must meet seven of the ten General Education Requirements .

Student Learning Outcomes can be found at www. canton.edu/csoet/it/.

# Additional Graduation REQUIREMENTS

Students must take at least four upper level CITA/MINS courses and SOET 477 (Capstone Project) from SUNY Canton. Each required CITA / Program Elective course used to meet graduation requirements must have a grade of C or higher or transfer credit.

SOET 361 Project Management.....3

Semester V

BSAD 301

CITA 300

CITA 310

General Elective.....3

Principles of Management ......3

Management Information Sys......3

Web Server Administration......3

GER Course.....<u>3</u>

# Legal Studies-B. Tech.

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, and Criminal Justice to receive an interdisciplinary education.
- Can choose online program components for maximum flexibility.
- Engage in a semester-long internship as a culminating experience.

#### CAREER OPPORTUNITIES

- Paralegals or legal assistants in law firms.
- Specialists in Real estate and mortgage document preparation.
- Professionals in District Attorney, Sheriff and Probation Offices.
- Freelance work as Paralegals.

## CAREER OUTLOOK

 Jobs for graduates in Legal Studies are projected to grow by 18 percent from 2010 to 2020 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 Expository Writing (ENGL 101) or Oral and Written Expression(ENGL 102).
- 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 LEST 101	Credits American Legal System3
LLS1 101	MATH Elective (GER1)3
ENICL 101	American History Elective (GER 4) .3
ENGL 101	Expository Writing OR
ENGL 102	Oral and Written Expression3
CITA 110	Intro. to Information Technology3
FYEP 101	First Year Experience1
	16
Semester II	
ACCT 101	Foundations of Financial Accounting.
	3
BSAD 200	Business Communications**3
BSAD 201	Business Law I3
	Social Science Elective (GER 3)3
	Arts Elective (GER 8)3
CITA 101	Library/Info Literacy1
	16
C . III	
Semester III	
BSAD 202	Business Law II
LEST 221	Criminal Practice3
	Sciences Elective (GER 2) 3-4
	West. Civilization Elec. (GER 5)3
	Foreign Language (GER 9)4
	16-17

Semester IV LEST 310 LEST 320	Legal Research
Semester V LEST 340 LEST 330 LEST 350	Constitutional Law
Semester VI BSAD 319 LEST 370 LEST 380 LEST 449	Professional Ethics
Semester VI	I
LEST 429	Internship Orientations
LEST 360	(If taking LEST 480 in 8th semester)
Semester VI	II
LEST 480	Legal Studies Internship (3 - 15 credits depending on hours worked) OR
LEST 485	Senior Project (3 - 15 credits depending on hours worked) OR
	5 U/L Program Electives
	$\frac{\overline{15}}{15}$

#### Total Credits for Degree 123-126

\*\* Writing Intensive Course

U/L = Upper Level Courses (300/400)

GER = General Education Requirement

Program Electives: Courses in ACCT, LEST, BSAD, or JUST (Except JUST 101, 110, and 111). Legal Issues in E & D (EADM 307), Perpetrators & Victims: Crime and Violence in Literature (ENGL 305), Professional Writing and Communication (ENGL 301), Introduction to Finance, (FSMA 210), Estate Planning (FSMA 410), Legal and Ethical Issues in Health Care (HSMB/NURS 302), and Funeral Service Law (FSAD 401).

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.

### 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 Expository Writing (ENGL 101).
- · Transfer students must have a cumulative GPA of 2.0 to be admitted into the program.

PROGRAM REQUIREMENTS:	Semester VI BSAD 319 Professional Ethics*
(Curriculum 1645)	BSAD 340 Management Communications3
Semester I Credits BSAD 100 Intro. to Business	BSAD 350 Marketing
Mathematics Elective (GER 1) 3-4 Western Civilization (GER 5)	Semester VII  BSAD 400 Operations Management
Accounting	U/L Elective (BSAD/ECON/ ACCT/MINS/SPMT)3 15
American History (GER 4)	Semester VIII BSAD 406 Cumulative Evaluation-BBA in Management
Semester III  BSAD 201 Business Law I	BSAD 450** Business Internship AND/OR. 6-12 BSAD 410 Senior Project AND/OR
ECON 103 Microeconomics	L/L = Lower Level Courses (100/200)  U/L = Upper Level Courses (300/400)  GER = General Education Requirement  * Fulfills writing intensive requirement.
Semester IV  BSAD 202 Business Law II	**3.0 GPA required to enroll in BSAD 450 Business Internship  Program Electives: ACCT, BSAD, ECON, FSMA, LEST, GMMD, HSMB, SPMT and MINS  Reminder: Prerequisite to BSAD 450 or BSAD 410 is BSAD 405 (Orientation to Culminating
Semester V	Experience)  NOTE: Management students must meet eight of the ten General Education Requirements.
BSAD 301 Principles of Management	Student Learning Outcomes can be found at www. canton.edu/business/bsad/.

# Mechanical Technology-B. Tech.

Graduates of the Bachelor of Mechanical 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, and heating, ventilation and air conditioning (HVAC) systems. 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 their track of study between Design/ Manufacturing and Energy (HVAC and Alternative Energies).
- 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 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.

### 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-
- Refer to the table of high school course prerequisites for admission.

Credits

# Program Requirements:

### (Curriculum 2250

Semester I

ENGL 101	Expository Writing OR
ENGL 102	Oral and Written Expression3
ENGS 101	Introduction to Engineering2
MATH 123	Pre-Calculus Algebra4
PHYS 121	College Physics I OR
PHYS 132	University Physics I3
PHYS 125	Physics Lab I1
	CAD Elective2-3
	15-16
Semester II	
ENGS 102	Programming for Engineers2
MATH 161	Calculus I4
MECH 128	Electromechanical Technology3
<b>CONS 172</b>	Technical Statics3

PHYS 122 PHYS132 PHYS 126	College Physics II OR University Physics II	
Semester III ELEC 261 MATH 162 MECH 241 MECH 242 CONS 272	Electricity       4         Calculus II       4         Fluid Mechanics       3         Fluid Power Lab       1         Strength of Materials for Tech       3         15	
Semester IV	Program Elective *3	
	Program Elective	
Semester V MATH 364	Differential Equations //	
MECH 301	Differential Equations	
MECH 342 SOET 377	Thermodynamics	
	Program Elective (U/L)3 GER (GER 3,4,5,6,7,8,9)3 16	
Semester VI MATH 141	Statistics3	
MECH 343 SOET 348	Heat Transfer	
30L1 J40	Program Elective (U/L)3	
	Program Elective (U/L)3 GER (GER 3,4,5,6,7,8,9)3 16	
Semester VI MECH 341	I Intermediate Fluid Mechanics3	
SOET 361	Project Management3	
	Program Elective (U/L)	
	GER (GER 3,4,5,6,7,8,9) <u>3</u>	
Semester VI		
MECH 4// SOET 370	Capstone Project	
	Program Elective (U/L)	
	GER course (GER 3,4,5,6,7,8,9)3	
* Fulfills writing intensive requirement		
U/L = Upper Level Courses (300/400)		
GER = General Education Requirement		
NOTE: Mechanical Technology students must meet seven of ten General Education Requirements, 45 upper level credits.		

upper level credits.

Student Learning Outcomes can be found at www. canton.edu/csoet/mech/.

—This is a new technology program; application has been submitted to ABET for accreditation of this program as an engineering technology program.

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 evidencebased practice in addressing the nursing care needs of culturally diverse individuals, families, groups and communities.
- Incorporate leadership theory to the nurse manage 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

### ACCREDITATIONS:

- Registered by the NYS Education Department, Office of the Professions.
- Accreditation Commission for Education in Nursing candidacy status.

### 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 Nursing4
MATH 111	Survey of Math OR
	Liberal Arts Elective*3
	Liberal Arts Elective *3
	U/L Liberal Arts Elective3
	$\overline{16}$

Semester II	
<b>NURS 302</b>	Legal & Ethical Iss. in Healthcare3
<b>NURS 304</b>	Health Promotion & Restoration3
BIOL 310	The Genome3
MATH 141	Statistics
	Lib. Arts Elective (GER 4,5,6,7,8)3
	$\overline{15}$
Semester III	
<b>NURS 301</b>	Public Health Issues3
NURS 370	Research Methods in the Social
	& Health Sciences3
NURS 400	Nursing Mgmt & Leadership **3
	Lib. Arts Elective (GER 4,5,6,7,8)3
	U/L Lib. Arts Elec. (GER) <u>3</u>
	15
Semester IV	
NURS 402	Community Health Nursing3
NURS 403	Transcultural Nursing
	U/L Lib. Arts Elec. (GER)3
	U/L Liberal Arts Elective3
	U/L Liberal Arts Elective <u>3</u>
	14

- —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; 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/.

# Sports Management-BBA

The BBA in Sports Management prepares individuals for professional careers within sport organizations, such as nonprofit 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 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

<ul> <li>Ticket Sales Operation</li> </ul>
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- 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 must have prerequisites to enroll in a Math GER 1 course. (Math A Exam plus 1 year) and ENGL 101.

Credits

### PROGRAM REQUIREMENTS

(Curriculum 0182)

Semester I

BSAD 100 ENGL 101	Introduction to Business
ENGL 101	Oral and Written Expression3
LINGL 102	Math (GER 1)
	GER - Intro to Soc. recommended3
	GER (4, 5, 6, 7, 8, 9)3
	15-16
	1)-10
Semester II	
SPMT 101	Foundations of Sports Management .3
ACCT 101	Foundations of Financial
	Accounting4
ECON 103	
	GER (4, 5, 6, 7, 8, 9)3
	GER (4, 5, 6, 7, 8, 9) <u>3</u>
	16-17
Semester III	
SPMT 240	Sport Governance3
BSAD 201	Business Law I3
FSMA 210	Introduction to Finance3
	Natural Science (GER 2)3-4
	GER (4, 5, 6, 7, 8, 9)3
	GER (4, 5, 6, 7, 8, 9) <u>3</u>
Semester IV	15
Semester IV	15
SPMT 241	Legal Issues in Sport3
SPMT 241 SPMT 242	15  Legal Issues in Sport
SPMT 241 SPMT 242 BSAD 301	Legal Issues in Sport
SPMT 241 SPMT 242	Legal Issues in Sport
SPMT 241 SPMT 242 BSAD 301	Legal Issues in Sport

Semester V SPMT 202 SPMT 203 SPMT 307 SPMT 411 BSAD 310	Sport in Society
Semester VI SPMT 306 SPMT 308 BSAD 319	Sports Operations & Facilities Mgt3 Sports Event Management3 Professional Ethics
Semester VI	I
SPMT 410	Orienta. to Culminating Experience.1 U/L Program Electives
	п
Semester VI	II .
Semester VI SPMT 421	Sport Management Internship 6-15 OR
	Sport Management Internship 6-15
SPMT 421	Sport Management Internship 6-15 OR Senior Project
SPMT 421 SPMT 422 Students may senior proj	Sport Management Internship 6-15 OR Senior Project
SPMT 421 SPMT 422 Students ma senior proj Internship	Sport Management Internship 6-15 OR Senior Project
SPMT 421 SPMT 422 Students ma senior proj Internship	Sport Management Internship 6-15 OR Senior Project
SPMT 421 SPMT 422 Students ma senior proj Internship Upper Level SPMT 311	Sport Management Internship 6-15 OR Senior Project
SPMT 421 SPMT 422 Students ma senior proj Internship Upper Level SPMT 311 SPMT 312	Sport Management Internship 6-15 OR Senior Project
SPMT 421 SPMT 422 Students may senior proj Internship Upper Level SPMT 311 SPMT 312 SPMT 412	Sport Management Internship 6-15 OR Senior Project
SPMT 421 SPMT 422 Students ma senior proj Internship Upper Level SPMT 311 SPMT 312	Sport Management Internship 6-15 OR Senior Project
SPMT 421 SPMT 422 Students may senior proj Internship Upper Level SPMT 311 SPMT 312 SPMT 412 SPMT 413	Sport Management Internship 6-15 OR Senior Project
SPMT 421 SPMT 422 Students may senior proj Internship Upper Level SPMT 311 SPMT 312 SPMT 412	Sport Management Internship 6-15 OR Senior Project

(Upper level BSAD, ECON, FSMA, HEFI courses also accepted as Program Electives)

SPMT 432 Applied Sports Event Management...3

Broadcasting......3

- \* Fulfills writing intensive requirement
- \*\* Courses under development

UL = Upper Level Courses (300/400)

GER = General Education Requirement

NOTE: Sports Management students must meet seven out of ten General Education Requirements including one and ten, 30 total General Education Requirements.

**Student Learning Outcomes** can be found at www. canton.edu/sci\_health/spmt/

# Veterinary Services Management—B. Tech.

The Bachelor of Technology in Veterinary Services Management constitutes the final two years of a 2+2 articulation program in which the first two years entail completion of a degree in Veterinary Technology from an accredited program. This degree serves to provide the knowledge and skills necessary to manage a business or organization that provides veterinary care to animals. Emphasis is placed upon establishing a foundation in basic business and accounting principles, then applying these principles to the management of specific types of veterinary businesses and institutions. Students will complete 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
- Biomedical Research Facility Management
- Diagnostic Laboratory Management

- Animal Shelter Management
- Mobile and Spay/Neuter Clinic Management
- Zoo and Wildlife Management
- Public Sector employment

### 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, enhancing the earning potential of 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.

# Admission Requirements:

- Graduation from an AVMA accredited veterinary technology program.
- Veterinary Technician licensure, registration, or certification, as applicable for state of residency, or eligibility thereof.

### PROGRAM REQUIREMENTS:

#### (Curriculum 1672)

•	•
Semester V	
ACCT 101	Foundations of Financial
	Accounting4
BSAD 201	Business Law I3
BSAD 340	Management Communications3
MATH 111	Survey of Mathematics OR
MATH 141	Statistics3
	U/L Liberal Arts Elective (GER) <u>3</u>
	16
Semester VI	
ACCT 102	Foundations of Managerial
	Accounting3
VSCT 301	Veterinary Hospital Management I3
BSAD 310	Human Resource Management3
HSMB 303	Occupational Health and Safety3
	Liberal Arts Elective (GER)3
	15
Semester VI	I
HSMB 301	Public Health Issues3
BSAD 301	Principles of Management3
VSCT 302	Veterinary Hospital Mgt. II3
VSCT 308	Veterinary Services Management
	Internship Orientation1
VSCT 401	Issues & Perspectives in Veterinary
	Medicine*
	U/L Liberal Arts Elective (GER)3
	16
Semester VI	
VSCT 408	Internship for Veterinary Services
	Management12
HSMB 410	Senior Seminar3
	15
* Fulfills wri	ting intensive requirement.
U/L = Upper	· Level Courses (300/400)
GER = General Education Requirement	
	rinary Services Management students
must man	t seven of the ten General Education

NOTE: Veterinary Services Management 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 Bachelor 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 Bachelors of Science degree. Graduates of this program will become veterinary technologists. Veterinary technicians and technologists perform the duties that are often described as those of a veterinary nurse.

### 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.
- 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 technologists provide professional technical support to veterinarians, biomedical researchers, and other animal care specialists. They may work in:

- Management
- 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.

### 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 three vaccinations, must be completed prior to starting your second semester veterinary technology courses.

Credits

### PROGRAM REQUIREMENTS:

#### (Curriculum 2278)

Semester I

PSYC 101

VSCT 101	Fundamental Vet. Nursing Skills I2
VSCT 103	Intro. to Animal Agriculture2
BIOL 150	College Biology I4
CHEM 150	College Chemistry I4
ENGL 101	Expository Writing OR
ENGL 102	Oral and Written Expression <u>3</u>
	15
Semester II	
VSCT 104	Veterinary Office Practices1
VSCT 114	Animal Anatomy & Physiology3
VSCT 115	Fundamental Vet. Nursing Skills II2
BIOL 155	College Biology II4
CHEM 155	College Chemistry II4
	Lib.Arts Elec. (GER 4, 5, 6, 7,8, 9)3
	17
Semester III	
VSCT 206	Anesthetic Principles3
VSCT 207	Health & Disease of Farm Animals3
BIOL 209	Microbiology4
	Math Elective (GER 1) † 3-4
	Lib.Arts Elec. (GER 4, 5, 6, 7,8, 93
	16-17
Semester IV	
VSCT 112	
VSCT 212	
100T 212	D 13.7

Semester V	
VSCT 202	Veterinary Clinical Pathology II3
VSCT 203	Small Animal Medicine &
	Therapeutic Techniques3
VSCT 204	Large Animal Medicine &
	Therapeutic Techniques2
VSCT 205	Radiographic Techniques2
	U/L Program Elective3
	U/L Liberal Arts Elective3
	$\overline{16}$
Semester VI	
VSCT 102	Companion Animal Behavior2
VSCT 210	Veterinary Microbiology3
VSCT 211	Animal Hospital Practices and
	Procedures *3
VSCT 214	Veterinary Pharmacology2
	U/L Liberal Arts Electives6
	$\overline{16}$
Semester VI	т
BIOL 310	The Genome (GER 2)3
DIOLITIO	U/L Program Electives9
	U/L Liberal Arts Elective
	(GER 4,5,6 or 8) <u>3</u>
С . 3.77	
Semester VI	
BIOL 325	Biology in Society (GER 2)3
	U/L Program Electives6
	U/L Liberal Arts Elective
	(GER 4,5,6 or 8)3
	U/L Liberal Arts Elective3
	15
† Math Elec	tive: MATH 111, 121, 122, 141 or

- † 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: VSCT, BIOL, or CHEM; as well as: BSAD 319 Professional Ethics, HSMB 301 Public Health Issues, HSMB 303 Occupational Health and Safety, or SSCI 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/.

VSCT 213 Practical Nutrition......2

Introductory to Psychology.....

Lib.Arts Elec. (GER 4, 5, 6, 7,8, 9) <u>..3</u>

### 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.

### CAREER OPPORTUNITIES:

- 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. The accounting profession is committed to delivering a strong ethical foundation and a commitment to lifelong learning. The role of the accountant is ever changing and integral to any business entity.

# 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:

- Lowe's
- 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
- Burlington Vermont School District **Business Office**

### 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 fouryear program should consult their transfer school of choice prior to transfer.

# Admission Requirements:

• Students must be prepared to take Expository Writing (ENGL 101).

### PROGRAM REQUIREMENTS:

#### (Curriculum 0630)

Semester I	Credits
ACCT 101	Foundations of Financial
	Accounting <sup>1</sup> 4
ECON 101	Macroeconomics3
CITA 110	Intro. to Information Technology3
ENGL 101	Expository Writing3
	Mathematics*2
	16-17
Semester II	
ACCT 102	Foundations of Managerial

BSAD 200 Business Communications\*\*.....3

ECON 103 Microeconomics......3

Accounting<sup>1</sup>.....3

Humanities Elective (GER 7)......3

Mathematics (GER 1)<sup>2</sup>......3-4

# Semester III

Accounting Electives (2)6
Business Law I3
Program Elective or
GER (2,4,5,6,8,9) <sup>3</sup> ***3
Program Elective3
$\frac{15}{15}$

Semester IV	•
	Accounting Electives (2)6
FSMA 210	Introduction to Finance3
	Program Elective or
	GER (2,4,5,6,8,9) <sup>3</sup> ***3
	General Elective or
	GER (2,4,5,6,8,9) <sup>3</sup> ***3
	15

\* Intermediate Algebra (MATH 106); Math of Finance (MATH 108) or higher.

\*\* Fulfills writing intensive requirement.

GER = General Education Requirement

<sup>1</sup>Lowest acceptable grade 2.0.

<sup>2</sup>Lowest acceptable level: Intermediate Algebra (MATH 106). Math courses recommended: College Algebra and Statistics.

<sup>3</sup>Management or Finance Bachelor's Degree track: Seven GERSs are required.

#### A minimum cumulative GPA of 2.0 is required to remain in this program.

Program Electives: ACCT, BSAD, ECON, FSMA, LEST, or MINS

Student Learning Outcomes can be found at www. canton.edu/business/accounting.html.

# Air Conditioning 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:

- Prepare for employment as an air conditioning technician upon graduation.
- Study under experienced HVAC engineers.
- Work in spacious, well-equipped laboratories.
- Participate in community service projects related to their curriculum.
- Are introduced to the current trends and future directions of the HVAC industry.
- Are active participants in ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers).
- Have the opportunity to shadow employers in the field during the freshman year.
- Have opportunities for summer work in the HVAC field.

#### 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.
- Central New York Trane
- Siemens
- T.P. Woodside, Inc.
- 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:

 Students must be qualified to enter Pre-Calculus Algebra (MATH 123)

Students who do not meet the recommended high school math prerequisites will be admitted to either Heating and Plumbing Service or Air Conditioning Maintenance & Repair certificate programs. Students will be admitted into the Air Conditioning Engineering Technology program upon successful completion of either certificate program.

# PROGRAM REQUIREMENTS:

#### (Curriculum 0444)

*	
Semester I	Credits
ENGS 101	Introduction to Engineering2
ENGL 102	Oral and Written Expression3
MATH 123	Pre-Calculus Algebra4
<b>SOET 116</b>	Computer Drafting2
PHYS 121	College Physics I3
PHYS 125	Physics Lab I1
	15
Semester II	
MECH 103	Intro to HVAC-R3
ENGS 102	Programming for Engineers2
MATH 161	Calculus I4
	Humanities Elective (GER 7, 8, 9)3
PHYS 122	College Physics II3
PHYS 126	Physics Lab II1
	16
Semester III	
ACHP 243	Air Conditioning I3
ACHP 253	Domestic & Commercial
	Heating I *4
ELEC 261	Electricity4
MECH 241	Fluid Mechanics3
MECH 242	Fluid Power Lab <u>1</u>
	15
Semester IV	
	Program Elective CAD3
ACHP 264	Air Conditioning Syst. Design1
	Program Elective3
	Program Elective3
ELEC 141	Industrial Controls2
	GER Elective (GER 3, 4, 5, 6) <u>3</u>
	15

<sup>\*</sup> 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 Air Conditioning curriculum and earning a minimum GPA of 2.0 for all such credit hours taken while under the direct advisement of the program faculty.

# 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 collegelevel 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/Humanities6
Social Sciences6
Mathematics/Science
Liberal Arts & Science Elective3
General Electives9
30-32

<sup>\*</sup> Fulfills writing intensive requirement.

Student Learning Outcomes can be found at www. canton.edu/business/apprentice.html.

# Automotive Technology—AAS

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:

- SUNY Utica/Rome, Oswego
- Indiana State University

### ARTICULATION:

 Applicants who have completed a twoyear 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:

	•
(Curriculi	ım 0525)
Semester I	Credits
AUTO 101	Automotive Services2
AUTO 104	Basic Welding2
AUTO 111	Automotive Services Laboratory1
AUTO 112	Automotive Electrical Systems3
AUTO 122	Automotive Electrical Syst. Lab1
ENGL 102	Oral and Written Expression3
MATH101	Applied College Mathematics3
	11 8 15
Semester II	
AUTO 113	Engine Performance I3
AUTO 113	Engine Performance I Laboratory1
AUTO 141	Automotive Braking Systems3
AUTO 144	Auto. Braking Systems Lab1
MECH 121	Manufacturing Processes I3
PHYS 115	Basic Physics **
CHOOSE C	•
AUTO 102	
	Diesel Engines
AU1U 103	Automotive Air Conditioning2
Semester III	1/
AUTO 213	Engine Performance II4
AUTO 220	Internal Combustion Engines *4
AUTO 241	Suspension Design and Services2
AUTO 282	Suspension Design and Serv. Lab1
110 1 0 202	Elective3
	14
Semester IV	11
AUTO 212	Automotive Electrical Systems II4
AUTO 214	Automotive Computer Systems3
AUTO 230	Service Mgt. and Operations1
	Business Elective
	Humanities Elective3

- \* Fulfills writing intensive requirement.
- \*\*Other four credit hour laboratory science courses may be substituted with permission of the advisor from a list of approved course offerings.

Social Science Elective ......3

\*\*\*General elective courses can include (AUTO221-Automatic Transmissions [spring], AUTO225-Manual Transmissions [fall])

**Student Learning Outcomes** can be found at www. canton.edu/csoet/auto\_tech.html.

# Additional Graduation Requirements

Students must complete 11 credit hours that include AUTO 113, AUTO 114, AUTO 213, and AUTO 214 at SUNY Canton. Student's transfer records must be reviewed and approved by the Program Director.

# 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
- Consumer Marketing Service
- Wal-Mart
- Ward Real Estate
- American Red Cross
- Malone Telegram
- Self-employed (oil company)
- J. Riggings
- Kaman Industrial Technologies
- C. E. Brooks Investments
- New York State
- Mid-Valley Oil Company
- · Cohoes Fashions

### 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 Expository Writing (ENGL 101).

# PROGRAM REQUIREMENTS: AS DEGREE-TRANSFER PROGRAM (CURRICULUM 0671)

Semester I	Credits	,
ACCT 101	Foundations of Financial	
	Accounting4	Ė
BSAD 100	Introduction to Business3	Ó
ECON 101	Macroeconomics (GER 3)3	Ó
ENGL 101	Expository Writing (GER 10)3	ó
FYEP 101	First Year Experience***1	
	Mathematics* (GER 1) 3-4	Ė
	17-18	
Semester II		
ACCT 102	Foundations of Managerial	
	Accounting 2	

ACCT 102	Foundations of Managerial	
	Accounting	3
CITA 110	Intro. to Information Technology	
ECON 103	Microeconomics	3
	GER(2, 4, 5, 6, 7, 8, 9)	3
MATH 141	Statistics	3
		15

Semester II	I	
BSAD 200	Business Communications**	3
BSAD 201	Business Law I	3
	Program Elective	3
	GER (2, 4, 5, 6, 7, 8, 9)	3
	GER (2, 4, 5, 6, 7, 8, 9)	3
		15

Semester IV	•	
FSMA 210	Introduction to Finance	3
	Program Elective	3
	Program Elective	3
	GER (2, 4, 5, 6, 7, 8, 9)	3
	GER (2, 4, 5, 6, 7, 8,9)	3
		15 1/

\*Survey of Mathematics (MATH 111), College Algebra (MATH 121), Pre-Calculus Algebra and Trigonometry (MATH 123), and Calculus (MATH

- \*\* Fulfills writing intensive requirement.
- \*\*\*Required for Freshmen students only

GER = General Education Requirement - Students may take no more than one course per GER subject

Program Electives: ACCT, BSAD, ECON, FSMA, LEST, or MINS

### AAS DEGREE (CURRICULUM 632)

AAS DEGREE (CURRICULUM 632)			
Semester I	Credits		
ACCT 101	Foundations of Financial		
	Accounting4		
BSAD 100	Intro. to Business3		
ECON 101	Macroeconomics3		
ENGL 101	Expository Writing3		
FYEP 101	First Year Experience***1		
	Mathematics* <u>3-4</u>		
	17-18		
Semester II			
ACCT 102	Foundations of Managerial		
	Accounting3		
CITA 110	Intro. to Information Technology3		
ECON 103	Microeconomics3		
	Humanities Elective (GER 7)3		
	Mathematics* (GER 1)3-4		
	15-16		
Semester III	[		
BSAD 200	Business Communications**3		
BSAD 201	Business Law I3		
	Program Elective3		
	GER (2, 4, 5, 6, 8, 9) OR		
	General Electives3		
	GER (2, 4, 5, 6, 8, 9) OR		
	General Electives <u>3</u>		
	15		
Semester IV	•		
FSMA 210	Introduction to Finance3		
	Program Elective3		
	Program Elective3		
	General Elective3		
	GER (2, 4, 5, 6, 8, 9) OR		
	General Elective3		
	15		
*Intermediate Algebra (MATH 106), College Algebra			
	21), Survey of Mathematics (MATH		
	ulus (MATH 161), Math of Finance		
(MAIH 10	08), and Statistics (MATH 141).		

GER = General Education Requirement

Program Electives: ACCT, BSAD, ECON, FSMA, LEST, or MINS

Student Learning Outcomes can be found at www.canton.edu/business/bus\_admin.html.

<sup>\*\*</sup> Fulfills writing intensive requirement.

<sup>\*\*\*</sup> Required for all Freshmen

# 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 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 constructionrelated careers.

# RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- NYS Department of Transportation
- Atlantic Testing Laboratories
- CIVES Steel Corp.
- C & S Cos. General Contracting
- Northeast Construction Services, Inc.
- Bette and Cring Construction Group
- NC Dept. of Transportation
- Advanced Testing Labs
- Barrett Paving
- Northland Construction
- Army Corps of Engineers
- Stebbins Engineering

### TRANSFER OPPORTUNITIES:

Transfer Opportunities can be found at www.canton.edu/csoet/civil\_eng.html

#### **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
CONS 101	Elementary Surveying4
SOET 116	Intro. to Computer Drawing2
MATH	Math Elective4
FYEP 101	First Year Experience1
CITA 108	Intro to Spreadsheets1
PHYS 121	College Physics I3
PHYS 125	Physics Lab I1
	16
Semester II	
CONS 172	Technical Statics3
ENGL 102	Oral and Written Expression3
MATH	Math Elective**4
PHYS 122	College Physics II3
PHYS 126	Physics Lab II1
ENGS 102	Programming for Engineers2
	$\frac{5}{16}$
Semester III	
CONS 203	Advanced Surveying4
CONS 280	Civil Engineering Materials2
CONS 272	Strength of Materials for Tech3
CONS 314	Soil Mechanics*4
00110311	Social Sci Elective (GER 3,4,5or 6)3
	16
Semester IV	
SOET 250	Intro 3D CADD and BIM2
CONS 274	Construction Management
CONS 375	Structural Engineering Design3
CONS 322	Hydraulics
	Humanities Elec. (GER 7,8 or 9)3
	16

<sup>\*</sup> Fulfills writing intensive requirements.

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 Program Director.

<sup>\*\*</sup> MATH Electives = must complete 2 math courses. Must enter the program at MATH 123 or higher. If entering at MATH 123 students will complete MATH 123 and MATH 161. If entering at MATH 161 they will complete MATH 161 and MATH 162.

<sup>\*\*\*</sup> Students with experience in spreadsheets should enroll in CITA 109 (1 credit)

# Computer Information Systems-AAS

Computer Information Systems (CIS) students develop abilities for working with computer systems, databases, networks, and web development. Qualified graduates also have the opportunity of completing a four-year program in Information Technology with two additional years of study earning a Bachelor of Technology degree.

### STUDENTS IN THIS MAJOR:

- Develop the knowledge and experience for a successful career in the computer industry.
- Develop teamwork skills throughout the program.
- Enhance their skill sets by opportunities to electives of interest.
- Acquire hands-on experience in small, well-equipped laboratories.
- Work with qualified faculty in small class sizes solving real-world problems.

### CAREER OPPORTUNITIES:

- Junior Programmers
- Network technician/administrator
- Systems Manager
- Technical Representative
- Web Developer
- Help Desk Manager

#### CAREER OUTLOOK:

Computer Information Systems is expected to continue as a strong growth area for career opportunities.

# RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- SUNY Canton
- Clarkson University
- Canton-Potsdam Hospital
- St Lawrence-Lewis County BOCES
- Eclipsys
- IBM
- Corning, Inc.

### TRANSFER OPPORTUNITIES:

- SUNY Canton: Information Technology and Industrial Technology Management
- SUNY Plattsburgh: Information Technology

### **ADMISSION REQUIREMENTS:**

- Students must be qualified to enter at least Intermediate Algebra (MATH 106) and Oral and Written Expression (ENGL 102).
- High school chemistry and physics courses are recommended.
- High school computer technology courses are strongly recommended.
- Transfer students must have a minimum of 2.5 GPA.

Students who do not meet necessary prerequisites may be admitted to the college. However, completing the program may require more than two years.

### PROGRAM REQUIREMENTS:

(Curriculum 0581-01)

Semester I	Credits
BSAD 100	Introduction to Business3
CITA 163	Survey of Information Technology <sup>1</sup> 3
CITA 152	Computer Logic <sup>1</sup> 3
ENGL 102	Oral and Written Expression3
	Mathematics Elective <sup>2</sup> 3
	15
Semester II	
CITA 170	Computer Concepts & Oper. Sys13
CITA 170	Oper. Sys. Use & Administration <sup>1</sup> 3
CITA 202	Computer User Support*13
G1111 202	Math Elective <sup>2</sup> 3
CITA 180	Introduction to Programming <sup>1</sup> <u>.4</u>
C1111 100	16
Semester III	10
CITA 220	Data Comm and Network Tech <sup>1</sup> 3
CITA 221	Data Comm and Net. Tech Lab <sup>1</sup> 1
ACCT 101	Financial Accounting OR
ACCT 101	Survey of Accounting4
ECON 101	Macroeconomics OR
ECON 101 ECON 103	
CITA 215	Microeconomics
CHAZI	Database Systems with Web. Apps¹3 Program Electives ¹,53
	17
Semester IV	-,
CITA 250	Information Security 1
	Program Elective 1,5
	2–General Electives <sup>1, 3, 4</sup> <u>6</u>
	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.

'Any CITA course presented for meeting degree requirements must have a grade of at least C (or transfer credit). No more than 3 CITA credits with a course number below CITA150 may receive credit towards graduation.

<sup>2</sup>CIS minimum requirement is MATH 106 Intermediate Algebra. MATH 121 College Algebra and MATH 141 Statistics are required in B. Tech. IT Program.

<sup>3</sup>A general elective is any course for which the student has the appropriate prerequisites; see note 1 above

<sup>4</sup>Students pursuing a baccalaureate degree should select courses from the following GER areas when feasible. GER 2 Science (CHEM 107/108 Investigative Chemistry/ Lab recommended), GER4 American History; GER 5 Western Civilization; GER 6 Other World Cultures; GER 7 Humanities; GER 8 The Arts; or GER 9 Foreign Language.

<sup>5</sup>Program Electives are from Canino School of Engineering Technology, or the Business Department (including ACCT 102).

# Additional Graduation Requirements

Each CITA/MINS/SOET course used to meet graduation requirements must have a grade of "C" or higher. A transfer student must complete at least two CITA/MINS/SOET courses (six credit hours) numbered 200 or above which 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:

- Atlantic Testing Laboratories
- Barrett Paving Materials Inc.
- Northeast Construction Services
- C & S Companies
- Tuscarora Construction
- Jeffords Steel Inc.
- CIVES Steel
- Many local construction companies

### 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
SOET 101	Computer Usage for Technicians1
FYEP 101	First Year Experience1
CONS 112	Wood Structures3

SOET 116	Intro. to Computer Drawing2
BSAD 100	Intro to Business3
ENGL 102	Oral and Written Expression3
MATH	Math Elective**3
	$\overline{16}$
Semester II	
CONS 111	Commercial Structures3
CONS 132	Construction Drafting3
CITA 109	Intermediate Spreadsheets1
PHYS 115	Basic Physics4
MATH	Math Elective**4
	15
Semester III	
CONS 101	Elementary Surveying4
CONS 222	Construction Estimating 2
CONS 280	Civil Engineering Materials3
BSAD 201	Business Law I3
ACCT 104	Survey of Accounting4
	16
Semester IV	
CONS 274	Construction Management3
CONS 216	Soils in Construction *4
	Business or Cons. Elective***3
	Humanities Elective3
	Soc. Science Elective3
	16

- \* Fulfills writing intensive requirement.
- \*\* Math Elective = student must enter the program at MATH 101 or higher. At a minimum the student must complete MATH 135. If entering at MATH 101, students will complete MATH 101 and MATH 135. If entering at MATH 135 they will complete MATH 135 and a math elective of their choice. MATH 106 may be taken instead of MATH 101 and MATH 123 may be taken instead of MATH 135. A grade of C or better in MATH 101 (or MATH 106) is required to advance to MATH 135 (or MATH 123).
- \*\*\* The technical elective should supplement the individual's ability to perform some phase of construction field/office work. Students select the program elective from an approved list of courses and with approval from their academic advisor.

**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

# STUDENTS IN THIS MAJOR:

Acquire the basic knowledge of law enforcement and corrections.

### CAREER OPPORTUNITIES:

- Federal Law Enforcement Agent
- · Police Officer
- Probation or Parole Officer
- Corrections Officer

### CAREER OUTLOOK:

• U.S. Department of Labor forecasts faster than average growth for protective service occupations through the year 2016.

# RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Federal Bureau of Investigations (FBI)
- Secret Service
- U.S. Border Patrol
- U.S. Customs
- 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. Most of those students remain at SUNY Canton and pursue one of our baccalaureate degrees.

### **ADMISSION REQUIREMENTS:**

- Students must be prepared to take Intermediate Algebra (MATH 106)
- Students must be prepared to take Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102).
- Transfer students must have at least a 2.0 GPA.

# PROGRAM REQUIREMENTS: (Curriculum 0640)

Semester I	Credits
JUST 101	Intro. to Criminal Justice3
ENGL 101	Expository Writing OR
ENGL 102	Oral & Written Expression3
CITA 110	Intro. to Information Technology3
MATH 106	Intermediate Algebra13
PSYC 101	Introductory Psychology3
	15
Semester II	
JUST 105	Correctional Philosophy3
JUST 110	Criminal Law3
SOCI 101	Introduction to Sociology3
	Humanities Elective (GER 7)3
	Natural Science w/Lab (GER 2) 3-4

#### EMPHASIS A: Law Enforcement

### Semester III

JUST 111	Criminal Procedure3
JUST 201	Critical Issues in Crim. Justice *3
JUST 209	Law Enforce. Communications3
	American History Elective (GER 4)3
	General Elective3
	15
Semester IV	

#### 

#### OR

### **EMPHASIS B: Corrections Professions**

Semester III	
JUST 111	Criminal Procedure3
JUST 201	Critical Issues in Crim. Justice *3
JUST 211	Diagnostic Eval of Offender3
	American History Elective (GER 4)3
	General Elective <sup>2</sup> 3
	15
Semester IV	•
JUST 215	Community Based Corrections3
	Program Electives6

#### OR

PSYC 275

SSCI 181

Semester III

### EMPHASIS C: Criminal Justice Generalist

Abnormal Psychology ......3

Alcohol Drugs & Society......3

JUST 111	Criminal Procedure3
	Critical Issues in Crim. Justice *3
JUST 209	Law Enforce. Communications OR
JUST 211	Diagnostic Eval of Offender3
	American History Elective (GER 4)3
	Lib. Arts Elective (any GER)3
	15

#### SEMESTER IV

15-16

Program Electives	9
Lib. Arts Elective (GER 5, 6, 8, 9)	3
Lib. Arts Elective (any GER)	3
•	15

<sup>\*</sup> Fulfills writing intensive requirement.

GER = General Education Requirement

- 1 Intermediate Algebra (MATH 106) is the minimum level acceptable toward AAS degree (non-transferable to a bachelor program). 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 - it is a pre-requisite for all other CJ/CI courses.
- 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).

# Dental Hygiene-AAS

# STUDENTS IN THIS MAJOR:

- Perform all phases of dental hygiene care, including assessment, planning, implementation, evaluation, and documentation based on accepted scientific theories and research.
- Develop skills to communicate effectively, professionally and respectfully with their peers, the faculty, staff, other health care professionals, and their patients in the clinic and during community and professional presentations.

### CAREER OPPORTUNITIES:

- Private dental offices
- Hospital dental clinics
- Military installations
- Nursing homes, residential assisted living facilities, and rehabilitation centers
- Pharmaceutical sales
- County and state health departments
- · School-based oral health programs

#### **ACCREDITATIONS:**

- The American Dental Association (ADA)
   Commission on Dental Accreditation (CODA), 211 East Chicago Avenue,
   Chicago, IL 60611, 312-440-2547 (http://www.ada.org).
- The program is also registered with the NYS Education Department, Office of Professions.

# Admissions Requirements:

- Admission is selective based on academic performance. Applicants must have a minimum grade of 75 in Regents-level chemistry, geometry/Math A plus one year; or a C grade in equivalent collegelevel courses. As well as a minimum C grade in Human Anatomy & Physiology I at the college level. The selection committee will review and rank qualified applicants beginning in early February.
- Applicants must have a high school diploma or its equivalent.
- Students entering college for the first time who have successfully completed

2 units of math and received a >75 on the Biology and Chemistry regents are encouraged to apply to the Dental Hygiene Select program. This 1 year program is designed to prepare students coming straight from high school for the AAS program. Students earning a 3.0 GPA or higher in the Select program are automatically reserved a seat in the AAS program the following year.

The Dental Hygiene associate degree program at SUNY Canton has an unsurpassed record of excellence, including:

- A 100 percent pass rate on the dental hygiene national board examination.
- A 97 percent pass rate on the dental hygiene regional clinical examination.
- A 100 percent placement rate.
- Three prestigious National Community Dentistry awards.

### PROGRAM REQUIREMENTS:

#### (Curriculum 0545)

Curruni	illi UJIJ)	
Semester I		Credits
DHYG 145	Dental Radiology	3
DHYG 155	Infection Control	1
DHYG 156	Oral Anatomy	2
DHYG 140	Pre-Clinical Theory	
DHYG 141	Pre-Clinical Dental Hygiene	2
DHYG 142	Intro to the Patient Apmt	1
DHYG 161	Histology & Embryology	1
BIOL 218	Human Anatomy & Phys II.	4
ENGL 102	Oral & Written Expression	<u>3</u>
		19
Semester II		
BIOL 209	Microbiology	4
DHYG 160	Dental Pathology	
DHYG 150	Dental HygieneTheory I	2
DHYG 151	Clinical Dental Hygiene I	3
DHYG 159	Dental Health Education	2
DHYG 147	Head & Neck Anatomy	2
DHYG 190	Radiographic Interpretation	
DHYG 256	Medical Emergencies	1
	-	18
Semester III		
DHYG 215	Pain Management	1
DHYG 220	Periodontology	
DHYG 221	Dental Pharmacology	
DHYG 240	Dental Materials Theory	
DHYG 241	Dental Materials Lab	1
DHYG 250	Dental Hygiene II Lecture/La	
DHYG 251	Clinical Dental Hygiene II	3
HLTH 175	Nutrition	3
		16

Semester IV	
	Community Dental Health*2
DHYG 270	Clinical Dental Hygiene III4
DHYG 280	Ethics & Jurisprudence1
	Sophomore Seminar1
DHYG 290	Special Needs1
PSYC 101	Introduction to Psychology3
SOCI 101	Introduction to Sociology3
ANTH 102	Intro to Cultural Anthropology3
	18

\* Fulfills writing intensive requirement

Student Learning Outcomes can be found at www. canton.edu/sci\_health/dental\_hygiene/.

- A grade of "C" (75) or better is required for all DHYG courses and a grade of "C" or better is required in BIOL courses to continue in the program.
- Once matriculated into the Dental Hygiene, AAS students must complete the program within 4 years.
- If a student fails a DHYG and/or BIOL course s/he
  will be required to step out of the program since each
  semester builds upon the previous courses taught. The
  student must re-apply and will be evaluated using the
  same selection criteria as a first semester freshmen and
  on a space available basis.
- If the student fails two dental hygiene courses in any given semester, s/he will lose matriculation in the program and will not be considered for readmission into the program.
- Transcripts for students wishing to transfer from another ADA accredited dental hygiene program will be evaluated on an individual basis. Students are required to provide course descriptions and a list of course requirements to aid in this evaluation. If it is determined that the course is equivalent to that offered at SUNY Canton, credit will be awarded.
- Students must complete CPR certification (Health Provider Status) prior to entering DHYG 141: Pre-Clinic; and all students must complete a NYS certified child abuse course as part of DHYG 280 Ethics & Jurisprudence
- Although the program has a patient coordinator that assists in the scheduling of patients, the Dental Hygiene student is ultimately responsible for finding new patients and treating a diverse group of patients. Students are also responsible for seeking transportation to and from all off-campus enriching sites.
- For additional information, please see the website.

Applicants for NYS licensure must be a U.S. citizen or an alien lawfully admitted for permanent residency in the U.S. The applicant must also be of good moral character. Anyone convicted of a crime or who has committed an act which raised question as to his/ her moral character will be subjected to review by the State. SUNY Canton strongly encourages anyone with a prior conviction to contact the Office of Professional Discipline. Completion of coursework does not guarantee NYS License. For additional information, you can visit the NYS Education Department, Office of Professions website at www.op.nysed.gov/dent.htm.

Residency Requirement: Students must complete Dental Hygiene II (DHYG 250/251) and Clinical Dental Hygiene III (DHYG 270)

# Early Childhood—AS

# STUDENTS IN THIS MAJOR:

- Participate in student teaching fieldbased experiences in various child care environments including: Head Start Programs, Universal Pre-K, and Kindergarten Public School Classrooms, Child Care Centers, Family Child Care Provider Homes, Nursery, and Pre-School settings.
- 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.
- Take part in professional development opportunities offered through seminars, workshops, and our full-day Annual Early Childhood Conference, held every fall on our campus.
- Acquire practical experiences in our Maria Sergi Early Childhood Teacher Center.
- Prepare for rewarding careers in Early Care and Education or transfer to 4-year Early Childhood Education Programs.

#### 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 Center Provider

### CAREER OUTLOOK:

- U.S. Department of Labor lists Child Care Worker, Elementary Teacher, and Teacher Assistant among the 30 occupations with the largest projected employment growth from 2010-2020.
- Certification requirements are increasing for Early Care and Education providers.
   Associate and Bachelor Degrees are necessary to work in lead positions in child care facilities and Head Start programs.

 Changes in society and the workforce demand an increase in the availability of high-quality early child care and education options for families and children from infancy to pre-kindergarten.

### Transfer Opportunities:

- SUNY Cobleskill\*
- SUNY Plattsburgh\* (Child and Family Services)
- SUNY Oneonta (Child Development and Family Studies)
- SUNY Cortland
- SUNY Brockport
- \* Articulation agreements in effect.

### Admission Requirements:

- Students must meet entrance requirements and be eligible for enrollment in: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102).
- Students must be eligible for enrollment in \*Beginning Algebra (MATH 100) or \*Intermediate Algebra (MATH 106) in the first semester, or be eligible for enrollment in a college-level math course (MATH 111, 115, or 121).
- Transfer students must have a minimum 2.0 GPA for admittance to the ECHD major.
- 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 must receive a minimum 2.5

- (C+) in Student Teaching Experience I (ECHD 201) to enroll in Student Teaching Experience II (ECHD 202).
- Students are required to complete courses in Identification of Child Abuse & Neglect, First Aid, and CPR.
- Early Childhood students must have evidence of a recent physical exam and updated immunizations.
- For off campus teaching experiences (ECHD 201 & ECHD 202) students will need to arrange for transportation to their assigned placement sites.

#### (Curriculum 1327)

Semester I ECHD 101 ENGL 101 PSYC 101 FYEP 101	Credits Introduction to Early Childhood3 Expository Writing3 Introduction to Psychology3 First Year Experience1 Science Elec. w/lab (GER 2)**4 General Elective (GER 1-9)3
Semester II	1/
ECHD 121 ECHD 131 ENGL 216 PSYC 220	Wellness in Young Children       .3         Infants and Toddlers       .3         Children's Literature       .3         Child Development       .3         Math Elective (GER 1)**       .3         15
Semester III	
	Student Teaching Experience I w/Seminar
Semester IV	(GER 8 or 9)
	Student Teaching Experience II w/Seminar6

ECHD 200 Planning Prog. for Young Children...3

ECHD 285 Iss. & Policies in Early Care & Ed.\*..3

General Elective (GER 1-9).....3

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/.

<sup>\*</sup> Fulfills writing intensive requirement.

<sup>\*\*</sup> One college-level mathematics course (Math for Elementary Teachers or Survey of Math recommended) and one science course with a lab are required.

# 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 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.

### STUDENTS IN THIS MAJOR:

- Utilize their computer in all of the major courses to enhance employability upon graduation.
- Acquire hands-on experience with programmable controllers, motors, generators, electrical power systems, industrial electronics, communications, and other related areas.
- Study under experienced faculty members in small class settings.
- Are recommended to have a laptop computer duringtheir senior year.

### 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
- 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
- IBM
- C & S Engineers, Inc.
- NYSEG
- Verizon

### TRANSFER OPPORTUNITIES:

- SUNY Canton: B.Tech in Electrical Technology, Alternative & Renewable Energy Systems, and Industrial Technology: Management
- Rochester Institute of Technology
- SUNY Institute of Technology
- SUNY Alfred

#### 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 I3
ELEC 109	Electric Circuits I Laboratory1
ELEC 161	Electronic Fabrication2
ENGS 102	Programming for Engineers2
ENGL 101/	102 Oral and Written Expression OR
	Expository Writing3
MATH 123	Pre-Calculus Algebra4
FYEP 101 F	irst Year Experience1
	16
Semester II	
ELEC 102	Electric Circuits II3
ELEC 129	Electric Circuits II Laboratory1
ELEC 141	Industrial Controls2
ELEC 165	Digital Fund & Systems3
ELEC 166	Digital Fund & Systems Lab1
	English (Literature)3
MATH 161	Calculus I <u>4</u>
	$\overline{17}$
Semester III	
ELEC 213	Microprocessors *3
ELEC 215	Electrical Energy Conversion4
ELEC 231	Electronic Circuits4
SOET 116	Intro to CAD & Design2
	131 College Physics I OR
	University Physics I3
PHYS 125	Physics Lab I <u>1</u>
	$\frac{17}{17}$
Semester IV	,
ELEC 203	Engineering Technology Project1
FLEC 225/2	383 Telecommunications OR
LLLC 22)13	Power Transmission & Distribution3
ELEC 332	Industrial Electronics
ELEC 243	Automated Control Systems2
	132 College Physics II OR
	University Physics II3
PHYS 126	Physics Lab II1
SOET 377	*Engineering Ethics <u>1</u>
	18
* Fulfills wri	ting intensive requirement.

#### 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 earning 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
- 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	Credits
ENGS 101	Introduction to Engineering2
CHEM 150	College Chemistry I4
	English (Writing)3
MATH 161	Calculus I4
PHYS 131	University Physics I3
PHYS 135	University Physics Lab I1
	$\frac{17}{17}$
Semester II	
ENGS 102	Programming For Engineers2
CHEM 155	College Chemistry II4
	English (Literature)3
MATH 162	Calculus II4
PHYS 132	University Physics II3
PHYS 136	University Physics Lab II1
	$\frac{17}{17}$
Semester III	
ENGS 201	Statics
ENGS 205	Nature & Properties of Materials3
MATH 263	Calculus III4
PHYS 133	University Physics III3
PHYS 137	University Physics Lab III1
	General Elective3
	$\overline{17}$
Semester IV	
ENGS 202	Dynamics3
ENGS 203	Engineering Strength of
	Materials (Optional)3
ELEC 263	Electric Circuits
ECON 103	Principles of Microeconomics3
MATH 264	Differential Equations3
	12 (15)
* Fulfills wri	ting intensive requirement

<sup>\*</sup> Fulfills writing intensive requirement.

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 Engineering2
SOET 116	Intro. to Computer Aided
	Drafting and Design3
ENGL101	Expository Writing OR
ENGL 102	Oral and Written Expression3
MATH 123	Pre-Calculus Algebra4
PHYS 121	College Physics I3
PHYS 125	Physics I Lab <u>1</u>
	16
Semester II	
ENGS 102	Programming for Engineers 2
MECH 128	
	Social Science Elective3
	Math Elective** 4
	Science Elective w/lab4
	$\overline{16}$
Semester III	
Semester III	Program Elective***9
	Math Elective **
	Humanities Elective $\frac{3}{15}$
	1)
Semester IV	D 51
	Program Electives***12
	General Elective3
	15

<sup>\*</sup> Fulfills writing intensive requirement.

**Student Learning Outcomes** can be found at www. canton.edu/csoet/general.html.

<sup>\*\*</sup> 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.

<sup>\*\*\*</sup> 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.

# 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 Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102).
- 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 Sciences	6
Natural Sciences and/or Mathematics	6
Applied Electives *	30
Liberal Arts Elective	3
General Electives	9
	60*

\*All students must take a writing intensive applied elective.

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. Graduates have successfully transferred to pharmacy and physical therapy programs.
- 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.

# RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Burke's Construction
- Fleet Bank
- Corning, Inc.
- Claxton-Hepburn Medical Center
- Potsdam Stone and Concrete
- Morris Protective Services
- New York State Department of Social Services

#### Transfer Opportunities:

- SUNY Potsdam, Plattsburgh, Oswego, Cortland, Geneseo, and Brockport
- St. Lawrence University
- State University Centers at Albany, Buffalo, and Binghamton
- Clarkson University
- SUNY ESF
- SUNY Upstate Medical University at Syracuse

# 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.
- Prepared to take GER Math
  - —NYS Geometry Regents or Math A plus one year; or
  - —Already passed Intermediate Algebra or equivalent.

# PROGRAM REQUIREMENTS: DEGREE PROGRAMS

#### (Curriculum 0250)

	AA DEGREE	Credits
	ENGL 101 Expository Writing OR	
	ENGL 102 Oral and Written Expression	3
	FYEP 101 First Year Experience	1
	Humanities (GER 7)	3
	Humanities Elective	
	Fine Arts OR Language (GER 8, 9)	3
	American History (GER 4)	
	Western Civilization OR World History	
	(GER 5, 6)	3
	Mathematics (GER 1) 1	3
	Science (GER 2) <sup>2</sup>	
	Math or Science 3	
Social Science (other than history) (GER 3)		3
Social Science Elective		
	General Electives	12
	Liberal Arts Electives	12
		$\overline{61^{4}}$
	AC DECREE	

#### AS DEGREE

16 DEGREE	
ENGL 101 Expository Writing OR	
ENGL 102 Oral and Written Expression	3
FYEP 101 First Year Experience	
Humanities (GER 7)	
Fine Arts or Language (GER 8, 9)	
American History (GER 4)	3
Western Civilization OR World History	
(GER 5, 6)	3
Mathematics (GER 1) 1	3
Science (GER 2) <sup>2</sup>	
Math or Science <sup>3</sup>	3
Social Science (other than History) (GER 3)	
General Electives	
	61
1.6. 1.10.11 (1.1. (2.1777.44)	

<sup>&</sup>lt;sup>1</sup> Minimum level College Algebra (MATH 141) or Survey of Math (MATH 111)

**Student Learning Outcomes** can be found at www. canton.edu/business/libarts.html.

<sup>&</sup>lt;sup>2</sup> One science course must be a laboratory science. Two science courses minimum.

<sup>&</sup>lt;sup>3</sup> Minimum 12 credit hours of math/science

<sup>4</sup> Required: One writing intensive course in a liberal arts or science discipline

# 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 and construction to equipment testing and power generation, employment opportunities exist in production, product/system testing, quality improvement, and technical services support. The MET program is appropriate for individuals who like hands-on experience, enjoy technology, and want to use their heads. Math ability is important and students will center much of their effort on 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:

- Stature Electric, Inc.
- · Corning, Inc.
- CIVES Steel Co.
- IBM
- Viking-Cives, USA
- Schneider Packaging
- Acco Brands
- · Gleason Works
- Bombardier, Inc.
- Novelis
- Young and Franklin, Inc.

#### 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 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)

(	> 0 /
Semester I	Credits
ENGL 102	Oral & Written Expression3
ENGS 101	Introduction to Engineering2
MATH 123	Pre-Calculus Algebra4
	Manufacturing Processes I3
PHYS 121	College Physics I3
PHYS 125	Physics Lab I1
	$\overline{16}$
Semester II	
CONS 172	Technical Statics
MATH 161	Calculus I4
MECH 103	Intro to HVAC-R3
MECH 112	
PHYS 122	College Physics II3
PHYS 126	Physics Lab II <u>1</u>
	<u>= 17</u>
Semester III	
CONS 272	
ELEC 261	Electricity4
MECH 241	
	Fluid Power Lab
MECH 242	Technical Elective*3
	Social Science Elective3
	-/
Semester IV	
ELEC 141	Industrial Controls2
	Machine Design3
MECH 220	Engineering Materials*3
	Technical Elective**3
	Humanities Elective $\underline{\underline{3}}$
	14
* F 1C11 .	

<sup>\*</sup> Fulfills writing intensive requirement.

**Student Learning Outcomes** can be found at www. canton.edu/csoet/mech\_eng.html.

# Additional Graduation Requirements

Students must have complete the equivalent of one full-time semester hours (12 credit hours) under the direct advisement of the program faculty, in technically specialized courses offered by the program area.

<sup>\*\*</sup>Elective by advisement

### 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 deci-sion-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 im-prove 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.

### CAREER OPPORTUNITIES:

- Hospitals and outpatient clinics
- Long-term care facilities
- Community health agencies
- Schools

### CAREER OUTLOOK:

- The largest health care occupation
- There is increasing diversity in nursing employment, and projections indicate large numbers of new jobs.

### 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:**

- Accreditation Commission for Education in Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326 404-975-5000.
- Registered by the NYS Education Department, Office of the Professions.

### 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 Nursing6
NURS 103	Pharmacology I1
	Nursing Seminar1
BIOL 217	Human Anatomy & Physiology I4
ENGL 101	Expository Writing OR
ENGL 102	Oral and Written Expression3
	15

Semester II	
NURS 102	Psychiatric and Maternal Child
	Nursing9
<b>NURS 104</b>	Pharmacology II1
BIOL 218	Human Anatomy & Physiology II4
PSYC 101	Introduction to Psychology3
	17
Semester III	
NURS 200	Pharmacology III 1
<b>NURS 201</b>	Medical-Surgical Nursing I10
BIOL 209	Microbiology4
PSYC 225	Human Development OR
PSYC 220	Child Development3
	18
Semester IV	•
NURS 202	Medical-Surgical Nursing IV10
<b>NURS 203</b>	Profes. Issues & Trends in Nursing*1
NURS 204	Pharmacology IV1
	$\frac{1}{12}$

<sup>\*</sup> Fulfills writing intensive requirement.

Student Learning Outcomes can be found at www. canton.edu/sci\_health/nursing/.

- Enrolled students are required to purchase a standardized testing program.
- -CPR certification (Health Provider Status) is required prior to admission.
- Students will complete clinical experiences in hospitals, long-term care facilities, and community agencies throughout Northern New York. Clinical hours may include day, evenings, and weekends. The college does not provide transportation to clinical.
- -The New York State Education Department, Office of the Professions requires persons applying for licensure to answer questions related to criminal convictions and/or professional misconduct.
- -Once enrolled in Fundamentals of Nursing (NURS 101), students must complete this Nursing program within four years. For extraordinary situations, permission to complete beyond four years must be granted by the Dean of the School of Science, Health, and Criminal Justice in consultation with the Nursing Department Chair.
- Of the four clinical nursing courses (NURS 101, 102, 201, and 202) only one course may be repeated one time.
- –A grade of C+ or better is required for successful completion of all nursing courses, and a grade of C or better is required for all co-requisite courses.
- Successful completion of all corequisite courses and a semester GPA of 2.0 or better is required to continue in the program.

**Residency Requirement:** Students must complete SUNY Canton's NURS 201, 202, 203, and 204 in order to meet the program's residency requirements.

# 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 healthcare 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 2012-2013 Occupational Outlook Handbook, employment for PTA's is projected to grow 46% between 2010 and 2020.

### TRANSFER OPPORTUNITIES:

 Students can continue their studies in the Health and Fitness Promotion B. Tech program. The B. Tech program may assist students in meeting admissions requirements for a 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), 1111 North Fairfax Street Alexandria, VA 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org.

# Admission Requirements:

Admission is selective, based on academic credentials. To be considered for admission to the PTA curriculum, a student must possess the following:

- High School applicants: 80 cumulative high school average; a minimum grade of 75 on NYS Regents exams in biology, chemistry, and geometry/Math A plus one year of additional college prep math; Non-New York State high school applicants: Must have an SAT score of 1000 or higher (out of 1600) or an ACT composite score of 21, in addition to meeting out-of-state leveling requirements for all pre-requisite courses.
- Transfer or SUNY Canton applicants: 2.5 cumulative GPA; meet high school requirements or have taken equivalent of Introductory Biology, Introductory Chemistry, and Intermediate Algebra with a minimum grade of C. Successful completion of one semester of Anatomy and Physiology can replace one of the science requirements.
- A student who is just below the grade requirement for one of the pre-requisite courses may be considered for admission if they have an SAT score of 1000 or higher (out of 1600) or an ACT composite score of 21, as long as all other areas have been met
- Successful completion of higher level college science and math courses will be given bonus points on the selective admissions rating rubric
- Repeating a pre-requisite course will result in point deductions on the selective admissions rating rubric.
- Applicants are strongly encouraged to submit a personal statement of 300 words or less detailing their reasons for applying to the physical therapist assistant program.
- Review of qualified applicants will begin in early February with ongoing reviews monthly until the enrollment cap of 24 students is reached. The PTA Program Director has the right to make all final admissions decisions at his/her discretion taking into consideration all aspects of the student's application and academic record.

Students who do not meet the prerequisites may be eligible to enroll in a preparatory curriculum. Completion or admission into a preparatory curriculum does not guarantee admission to the PTA Program.

### PROGRAM REQUIREMENTS:

Students are required to independently earn Health Care Provider CPR certification and have an annual health assessment on file with the College and clinical site prior to the start of the first semester.

To progress in the PTA curriculum a minimal grade of "C" in BIOL 217 and 75 in all curriculum courses prefixed with PHTA must be achieved.

#### (Curriculum 0489)

Semester I	Credit	
PHTA 100		
	Intro. to Physical Therapy	
PHTA 101	Fund PT Skills & Modalities	
PHTA 104	Clinical I	l
BIOL 217	Human Anatomy & Physiology I	4
ENGL 101	Expository Writing OR	
ENGL 102	Oral and Written Expression	
PSYC 101	Introductory Psychology	3
	17	/
Semester II		
PHTA 102	Kinesiology	3
PHTA 103	Musculoskeletal Pathologies	4
PHTA 105	Musculoskeletal Assessment	
	Techniques	2
PHTA 106	Clinical II	1
BIOL 218	Human Anatomy & Physiology II	4
PSYC 225	Human Development	
	$\overline{1}$	/
Semester III		
PHTA 203	PTA Seminar I *	3
PHTA 204	Cardiopulmonary & Integumentary	
	Pathologies	3
PHTA 205	Neuromuscular Pathologies	4
PHTA 206	Advanced PT Modalities	
	Liberal Arts Elective	
	1'	
Semester IV	=-	
PHTA 207	** Clinical III	7
PHTA 209	** Clinical IV	
PHTA 210	PTA Seminar II	
1111A 210	10 Seminar II	
* Fulfills wri	ting intensive requirement.	υ

- \*\* Students must be prepared to work 40 hours per week and are responsible for their own transportation, meals, and housing as needed.
- **Student Learning Outcomes** can be found at www. canton.edu/sci\_health/pta/.
- —Students may be required to submit to a drug screen and/or a criminal background check as part of clinical education requirements.
- —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 mandatory kennel duty rotation in their senior year.

### 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 Management, B.Tech.)

# 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 three vaccinations, must be completed prior to starting your second semester veterinary technology courses.

### PROGRAM REQUIREMENTS:

#### (Curriculum 0521)

Semester I	Credits
VSCT 101	Fundamental Vet. Nursing Skills I2
VSCT 103	Intro. to Animal Agriculture2
BIOL 150	College Biology I4
CHEM 150	College Chemistry I4
ENGL 101	Expository Writing OR
ENGL 102	Oral and Written Expression3
FYEP 101	First Year Experience <u>1</u>
	$\overline{16}$

Semester II	
VSCT 104	Veterinary Office Practices1
VSCT 112	Veterinary Clinical Pathology I3
VSCT 114	Animal Anatomy & Physiology3
VSCT 115	Fundamental Vet. Nursing Skills II2
VSCT 212	Research Animal Techniques1
BIOL 209	Microbiology4
	Liberal Arts Elective (GER 7, 8, 9)3
	17
Semester III	
VSCT 202	Veterinary Clinical Pathology II3
VSCT 203	Small Animal Medicine &
	Therapeutic Techniques3
VSCT 204	Large Animal Medicine &
	Therapeutic Techniques2
VSCT 205	Radiographic Techniques2
VSCT 206	Anesthetic Principles3
VSCT 207	Health & Disease of Farm Animals3
	16
Semester IV	,
VSCT 102	Companion Animal Behavior2
VSCT 210	Veterinary Microbiology3
VSCT 211	Animal Hospital Practices and
	Procedures *3
VSCT 213	Practical Nutrition2
VSCT 214	Veterinary Pharmacology2
PSYC 101	Introductory Psychology3
	Liberal Arts Elective (GER 4, 5, 6)3
	15

- \* 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 residency requirement.

# Air Conditioning Maintenance & Repair-Certificate

# STUDENTS IN THIS CERTIFICATE Program:

- Gain the skills to begin a career in refrigeration and air conditioning service.
- · Install and service refrigeration and air conditioning equipment for residential and commercial buildings.
- Get hands-on experience in wellequipped, small laboratory sections.
- Receive one-on-one instruction from faculty who have experience in the field.

### CAREER OPPORTUNITIES:

- Refrigeration and Air Conditioning Contractor
- Manufacturer Representative
- Plant Maintenance Technician
- Appliance Repair Technician

### CAREER OUTLOOK:

The construction industry continues to exhibit a demand for skilled HVAC technicians.

# RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Refrigeration and air conditioning supply
- Hardware stores
- Farm supply and equipment dealers (Bulktanks, etc.)
- Fuel companies
- Contractors

### TRANSFER OPPORTUNITIES:

- SUNY Canton—AAS degree programs and other certificate programs.
- Other SUNY Technology Colleges' AAS programs.

### Admission Requirements:

· Students are expected to have demonstrated academic success in high school and/or prior college experience.

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.

### Program Requirements:

#### (Curriculum 1387)

Semester I	Credits
ACHP 103	Refrigeration & Air Conditioning
	Service I7
MATH 101	Applied College Mathematics3
ENGL 102	Oral and Written Expression3
CONS 151	Building Trades Blueprint Reading &
	Drafting2
SOET 101	
	Technicans1
	16
Semester II	
ACHP 104	Refrigeration & Air Conditioning
	Service II7
ACHP 105	Refrigeration System Design2
	General Electives (by advisement)6
	15

\* Mathematics level depends on previous preparation. Students who are unprepared to enter Applied College mathematics will be first required to satisfactorily complete MATH 099 Foundation of Applied College Mathematics.

Student Learning Outcomes can be found at www. canton.edu/csoet/refrig.html.

Those graduates who show sufficient interest and aptitude may qualify for entry into one of the associate degree programs.

# Criminal Justice Studies-Certificate

# STUDENTS IN THIS CERTIFICATE PROGRAM:

- Receive a background in math, English, social sciences and criminal justice.
- Are prepared for continued study in one of several programs in the Criminal Justice Department.
- Students graduate from program when courses have been completed with a minimum G.P.A. of 1.75.
- Due to intensive nature of this program, participation in sports, ROTC, etc. is prohibited during class hours.

### CAREER OPPORTUNITIES:

- Police officer
- · Correction officer
- Private security
- Crime prevention services

### TRANSFER OPPORTUNITIES:

- SUNY Canton—AAS degree program in Criminal Justice with a minimum cumulative G.P.A. of 2.0.
- SUNY Canton—B.Tech. program in Criminal Justice: Law Enforcement Leadership with a minimum cumulative G.P.A. of 2.25.
- SUNY Canton—B. Tech. program in Criminal Investigation or Homeland Security with a minimum cumulative G.P.A. of 2.5.

### **ADMISSIONS REQUIREMENTS:**

 Students are expected to have demonstrated academic success in high school and/or prior college experience.

# PROGRAM REQUIREMENTS:

#### (Curriculum 1753)

Fall Semester

Intro Criminal Justice3
Criminal Law3
Intro Information Technology3
First Year Experience1
Intro. Acad. Reading & Writing OR
Basic Writing* OR
Expository Writing OR ENGL 209
Approaches to Literature3
13-16
ester
Correctional Philosophy3
Criminal Procedure3
Introduction to Sociology3
Freshman Seminar1
Introductory Psychology3
Beginning Algebra3
16

Credits

NOTE: Many of the courses will be in 7 week block format.

**Student Learning Outcomes** can be found at www. canton.edu/sci\_health/just/proud.html.

<sup>\*</sup> Credits for these courses will not count towards a two- or four-year degree.

# 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
ELEC 171	Elec. Constr. & Maintenance I7
ELEC 173	Intro. to Nat. Electrical Code3
MATH 101	Applied College Mathematics3
SOET 101	Intro Computer Usage for
	Technicians1
	$\overline{14}$
Semester II	
ELEC 172	Elec. Constr. & Maintenance II7
	English (Writing)3
	Sci/Tech Elective3
	General Elective3
	$\overline{16}$

\*Mathematics levels depend on previous preparation. Students who are unprepared to enter MATH 101 will be required to first complete MATH 099 Foundation of Applied College Mathematics.

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.

# Additional Graduation Requirements

While at SUNY Canton students must have completed course ELEC 172 and earn a minimum GPA of 1.75.

# Health Science Career Studies-Certificate

# STUDENTS IN THIS CERTIFICATE PROGRAM:

- Receive a background in chemistry, biology, and math.
- Are prepared for rigorous health degree programs
- Are prepared for entry-level healthrelated jobs

### CAREER OPPORTUNITIES:

- Emergency Room Admit Clerks
- Ward Clerks
- Clinical Receptionist
- Veterinary Assistant

### TRANSFER OPPORTUNITIES:

 SUNY Canton—AAS degree programs in health careers • SUNY Canton—B.Tech. program in Health Care Management

### Admissions Requirements:

Students are expected to have demonstrated academic success in high school and/or prior college experience.

### Program Requirements:

#### (Curriculum 1774)

Semester I	Credits
	Applied Elective
	(HLTH, VSCT, etc) *3
MATH 100	Beginning Algebra OR **
MATH 106	Intermediate Algebra OR **
MATH 111	Survey of Mathematics **3
ENGL 101	Expository Writing OR
ENGL 102	Oral and Written Expression3
BIOL 101	Introduction to Biology OR ***
	Science Elective4
BASK 060	Freshman Seminar1
	$\overline{14}$

#### Semester II

	Applied Elective
	(HLTH, VSCT, etc) *3
CHEM 100	Intro to Chemistry Lab AND ***1
CHEM 101	Intro to Chemistry OR ***3
	Science Elective ***4
MATH 106	Intermediate Algebra OR
MATH 111	Survey of Mathematics OR
	General Elective3
	General Elective3
	Liberal Arts Elective3
	$\overline{16}$

- \* Applied electives are limited to the health areas.
- \*\* Minimum MATH 106 with a grade of "C" required for entry into health field AAS.
- \*\*\* Biology and chemistry requirements should be met before other science electives are taken. Minimum biology and chemistry with a grade of "C" required for entry in health field AAS.
- —In order to apply for health curriculum, a minimum GPA may be required; and most health curricula have selective admission.

Student Learning Outcomes can be found at www. canton.edu/sci\_health/health\_science.html.

# DENTAL SELECT

Dental Hygiene Select is an innovative program that fosters student success and facilitates admission into the College's Dental Hygiene associate degree program and continuation into the professional-level bachelor's degree program. Admission to dental hygiene programs is selective and the majority of students admitted to dental hygiene enter with at least one year of college. By entering the Dental Hygiene Select program, students are guaranteed admission into the two- and four-year programs (for students with a GPA of 3.0 or higher). The program starts with the first year at SUNY Canton's main campus for students with little or no college experience.

The program is designed for high school seniors who meet the minimum entrance criteria to the associate degree program in dental hygiene, including:

• A minimum high school GPA of 80 percent.

- High school biology with a regents score of at least 75.
- High school chemistry with a regents score of at least 75.

# STUDENTS IN THE DENTAL HYGIENE SELECT PROGRAM:

- Are part of a small group engaged in learning experiences in a nurturing environment.
- Participate in job shadowing and be introduced to basic dental hygiene procedures.
- Complete basic science and liberal arts courses.
- Complete course work in infection control and medical emergencies in the dental office.

# PROGRAM REQUIREMENTS:

#### (Curriculum 1774)

Semeste	,1 I	Credits
DHYG	155 Infection C	Control1
DHYG	100 Introduction	on to Dental Hygiene1
BIOL 2	.17 Anatomy δ	& Physiology I4
ENGL	102 Oral & Wri	tten Expression3
FYEP 1	01 First Year I	Experience1
MATH	111 Survey of I	Mathematics3
SOCI 1	01 Introduction	on to Sociology <u>3</u>
		16
Semeste	er II	
		nergencies1
DHYG	256 Medical E	nergencies
DHYG DHYG	256 Medical Er 263 Dental Nu	
DHYG DHYG ANTH	256 Medical Er 263 Dental Nu 102 Intro to Co	trition2
DHYG DHYG ANTH BIOL 2	<ul><li>256 Medical Er</li><li>263 Dental Nu</li><li>102 Intro to Co</li><li>209 Microbiolo</li></ul>	trition2 ultural Anthropology3
DHYG DHYG ANTH BIOL 2 BIOL 2	<ul> <li>256 Medical Er</li> <li>263 Dental Nu</li> <li>102 Intro to Co</li> <li>209 Microbiolo</li> <li>218 Anatomy &amp;</li> </ul>	trition
DHYG DHYG ANTH BIOL 2 BIOL 2	<ul> <li>256 Medical Er</li> <li>263 Dental Nu</li> <li>102 Intro to Co</li> <li>209 Microbiolo</li> <li>218 Anatomy &amp;</li> </ul>	trition

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\* Health certificate awarded upon successful completion of the one year Select program.

**Student Learning Outcomes** can be found at www. canton.edu/sci\_health/dh-select/.

# Heating and Plumbing Service-Certificate

The Heating & Plumbing Service (H&PS) program prepares students to work in the building trades with the installation, maintenance, and repair of plumbing equipment, furnaces and boilers. Emphasis is placed on residential installation and maintenance, but students are introduced to commercial applications as well. At the successful completion of this one-year program, students earn the H&PS certificate.

# STUDENTS IN THIS CERTIFICATE PROGRAM:

- Learn how to install and service plumbing and heating equipment for residential and commercial buildings.
- Obtain hands-on experience in wellequipped, small laboratory sections.
- Utilize laboratories and equipment in the Air Conditioning Engineering Technology program.

#### CAREER OPPORTUNITIES:

- Plumbing and heating contractors and supply houses
- Hardware stores

- Farm supply stores
- Fuel companies
- Plant maintenance

### CAREER OUTLOOK:

 The construction industry continues to exhibit a demand for skilled heating and plumbing technicians.

# RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Central New York Trane
- Self employed
- Hulbert Brothers
- · Griffith Oil Co.
- Armani

#### Transfer Opportunities:

- SUNY Canton—AAS degree programs and other certificate programs
- AAS degree programs at other colleges of technology

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 1949)

Semester I	Credits
CONS 151	Bldg Trades-Blueprint Reading
	& Drafting2
ACHP 171	Heating & Plumbing Principles
	and Practice I7
	English (Writing)3
MATH 101	
SOET 101	Intro to Computer Usage for
	Technicians1
	$\overline{16}$
Semester II	
ACHP 105	Refrigeration System Design2
ACHP 172	Heating & Plumbing Principles
	and Practice II8
	General Electives6
	$\overline{16}$

- Mathematics level depends on previous preparation; students are advised to continue mathematics coursework in both semester.
- –Students who are unprepared to enter MATH 101 must first satisfactorily complete MATH 099 Foundation of Applied College Mathematics.

**Student Learning Outcomes** can be found at www. canton.edu/csoet/heating.html.

# Powersports Performance and Repair— Certificate

Students completing the Powersports Certificate program are well prepared to commence a career in the service of motorcycles, ATVs, snowmobiles and watercraft. SUNY Canton's unique program continues to place graduates with manufacturers and dealers alike. This program is well suited for individuals who like to work with their hands, enjoy recreational power equipment, and desire the knowledge to service state-of art engine technologies. At the successful completion of this one-year program, students will earn the Powersports certificate.

# STUDENTS IN THIS CERTIFICATE PROGRAM:

- Receive a world-class education in the power sports industry.
- Experience the latest technology in an electronics-based curriculum.
- Gain hands-on experience in well-equipped laboratories.
- Have access to obtaining Polaris/Victory service certifications.
- Continue to enjoy 100% placement in the workforce.

### CAREER OPPORTUNITIES:

- Power Sports Service Technician
- Service Manager
- Service Advisor
- Industrial Research and Development
- Machine Shop Technician
- Parts Manager/Owner
- Technical Representative
- Maintenance Technician
- Marine Maintenance Technician

### CAREER OUTLOOK:

- The power sports industry is one of the fastest growing fields in the service industry.
- With the impact of electronic engine management, coupled with the new clean air amendments effective 2007, the need for competent, educated technicians in this field is higher than ever.
- Career opportunities are expected to grow rapidly for those who are familiar with current technologies.

# RECENT EMPLOYERS OF SUNY CANTON GRADUATES:

- Polaris/Victory
- Retail Manufacturers
- Federal Government
- Dealerships

### TRANSFER OPPORTUNITIES:

- SUNY Canton Automotive Program
- · SUNY IT and SUNY Oswego
- Rochester Institute of Technology
- Indiana State University
- Weber State College (Utah)

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 1632)

Semester I	Credits	S
MSPT 101	Motorsports Service3	;
MSPT 130	Marine Propulsion Systems2	)
AUTO 112	Auto. Electrical Systems3	5
AUTO 122	Auto. Electrical Systems Lab1	l
MATH 101	Applied College Mathematics*3	5
	English	5
	15	
Semester II		
MSPT 110	Engine and Power Transmission	
	Service4	Ĺ
MSPT 120	Frame and Suspension Systems3	5
AUTO 113	Engine Performance I	5
AUTO 114	Engine Performance I Lab1	L
	Business Elective3	5
	Humanities OR Social Science	
	Elective	;

**Student Learning Outcomes** can be found at www. canton.edu/csoet/powersports/.

# Additional Graduation Requirements:

- While at SUNY Canton, students must complete Motorsports Service (MSPT 110) and Frame and Suspension Systems (MSPT 120), earning a minimum GPA of 2.00 for these two courses.
- Students who are unprepared to enter Applied College Mathematics (MATH 101) must first satisfactorily complete Fundamentals of Applied Mathematics (MATH 099).

# Practical Nursing-Certificate

The SUNY Canton Practical Nursing Certificate program is based upon the beliefs that:

· Nursing care is based on a conceptual framework that is meaningful, logical, and relevant. Throughout an individual's life cycle, there is varying needs that must be met in order to maintain stability. As an evolving being, one is influenced by biological, cultural, psychological, and social factors. When needs are threatened by the internal or external environment, the individual interacts with the environment to restore balance. As an integral part of the health care delivery system nursing focuses on promoting, maintaining, and restoring balance on the health-illness continuum. The goal of nursing is to meet or assist with meeting biopsychosocial needs.

# STUDENTS IN THIS CERTIFICATE PROGRAM:

- Appraise the care provided to clients with stable and predictable conditions.
- Analyze patient disorders and nursing care utilizing current evidence based practice.
- Demonstrate developmentally appropriate, respectful and effective therapeutic communication skills.
- Interpret clinical scenarios and situations that fall outside of the PN scope of practice.
- Demonstrate, proper technique with nursing skills, use of patient care equipment and technology in a cost effective manner.
- Examine patient environmental factors, family support, and resources that may affect a patient'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 patient 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.
- Analyze self-performance and peer performance through the processes of observation, reflection, and peer-to-peer teaching.

#### CAREER OPPORTUNITIES:

- Long-term care
- Clinic settings
- Physician Offices
- Hospice
- Community Health
- Mental Health

### **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. & Pharm3
LPNC 101	PN Fundamentals8
BIOL 217	Human Anatomy & Physiology I4
ENGL 101	Expository Writing OR
ENGL 102	Oral and Written Expression3
	18
Semester II	
LPNC 102	PN Specialty Populations3
LPNC 103	PN Medical-Surgical 8
BIOL 218	Human Anatomy & Physiology II4
PSYC 101	Introduction to Psychology3
	18

- --Enrolled students are required to purchase a standardized testing program.
- -Students must complete all LPNC and corequisite courses with a minimal grade of C in order to graduate.
- –CPR certification (Health Provider Status) is recommended prior to admission and required prior to start of 2nd semester.
- –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.
- –Of the two clinical practical nursing courses (LPNC 101, LPNC 103), only one may be repeated one time.
- -Successful completion of all corequisite courses with a C or better and a semester GPA of 2.0 or better is required to continue in the program.
- Student Learning Outcomes can be found at www. canton.edu/sci\_health/practical.html.

# **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. A minor must be declared while the student has at least 45 credit hours left

to enroll in before qualifying for graduation. After matriculating in a program, students wishing to obtain a minor shall contact the coordinator of the minor to initiate the process. 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.

### ACCOUNTING

The minor is available to any SUNY Canton student interested in the accounting field. This is an opportunity for students to earn a minor in accounting, regardless of their undergraduate major, and give them the basic undergraduate courses necessary to sit for the CPA exam and complete a MS in Accounting. It allows accounting transfers from community colleges to earn the minor in Accounting, complete a baccalaureate degree, and then enroll in the MS in Accountancy.

### **MINOR REQUREMENTS:**

	Credits
ACCT 301	Intermediate Accounting I3
ACCT 302	Intermediate Accounting II3
ACCT 306	Cost Accounting3
	HREE COURSES

Auditing and Individual Taxation are required for the CPA exam and Advanced Accounting is recommended.

ACCT 245	Forensic Accounting	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	
	Management	3
BSAD 365	Financial Statement Analysis	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 hand on projects.

Credits

### **MINOR REQUIREMENTS:**

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	
PHYS 301	Introduction to Photonics	3
SELECT TW	VO COURSES	
PHYS 330	Intro to Classical Mechanics	3
PHYS 340	Electromagnetism	3
PHYS 410	Solid State Science	
PHYS 420	Intro to Quantum Mechanics	3
AREA 320	Experimentation and Measurement	
	Lab I	3
MECH 343	Thermodynamics	3

# Casino Management

The Casino Management Minor will give our business majors another alternative for career options. At present SUNY Canton is the only college in St. Lawrence County which offers any gaming classes as part of its curriculum. A minor in Casino Management is also an excellent supplement for persons who wish to pursue a career in the hospitality industry. This minor shall consist of a minimum of 18 credit hours, 12 of these consist of required courses. Students will have a choice of 6 elective credit hours. A minimum of 12 credit hours of the minor must be completed at SUNY Canton.

#### **MINOR REQUIREMENTS**

BSAD 353 Casino Management Strategic

	Approach	3
BSAD 354	Casino Financial Controls	3
BSAD 356	Casino Marketing	3
BSAD 357	Casino Gaming Methods	
	-	
SELECT TV	VO ELECTIVES/OPTIONAL	
BSAD 100	Introduction to Business	3
ECON 101	Principles of Macroeconomics.	3
LEST 101	The American Legal System	3
BSAD 200	Business Communication	3
FSMA 210	Introduction to Finance	3
ACCT 245	Forensic Accounting	3
BSAD 301	Principles of Management	
BSAD 319	Professional Ethics	3

# **C**ORRECTIONS

This minor will provide students, particularly those in the bachelor degree programs in Criminal Justice and Legal Studies, an opportunity to show a focus in Corrections studies on their transcript.

#### **MINOR REQUIREMENTS:**

	Credits
JUST 105	Correctional Philosophy3
JUST 211	Diagnostic Evaluation of the
	Offender3
JUST 215	Community Based Corrections3
JUST 313	Juvenile Justice3
JUST 340	Legal Issues of the Penal System3
SELECT OF	NE COURSE:
JUST 323	Multiculturalism in Criminal Justice.3
JUST 341	Management of Correctional
	Facilities3
JUST 353	Criminal Justice Technology3

### **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 REQUREMENTS:**

	Credits
ECON 101	Principles of Macroeconomics3
ECON 103	Principles of Microeconomics3
ECON 314	Managerial Economics3
ECON 315	Global Economy3
	•

SELECT TWO COURSES

Any course with an ECON 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.

# 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 mi-

nor 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:**

Core Requirements

Candita

A minimum of 19 credit hours is needed to complete the minor in Environmental Technology as follows:

Credits

CONS 285	Engineering Geology OR
ESCI 107	Earth Science OR4
GEOL 103*	Physical Geology3
ELECTIVE	COURSES
CONS 101	Elementary Surveying4
	Soil Mechanics3
CONS 350	Intro to GIS OR3
GEOL 340*	Geographic Information Systems4
CONS 385	Hydrology and Hydrogeology4
CONS 386	Water Quality4
CONS 387	Water and Wastewater Treatment3
CONS 388	Environmental Law2
CONS 485	Solid Waste Management3
CONS 486	Soil and Groundwater Remediation3
CONS 487	Water Resources, Management, and
	Design3
_	1 1 11 0777770 1 0: 1 1

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

# 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. This minor shall consist of a minor of 18 credit hours, at least half of which shall be upper division courses. A minimum of 12 credit hours of the 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.

### MINOR REQUIREMENTS

	Credits	
ACCT 101	Foundations of Financial Acct3	
FSMA 210	Introduction to Finance3	
FSMA 312	Financial Management3	
FSMA 315	Global Investment3	
SELECT TWO ELECTIVES (one elective must be a 400 upper level course)		
	Principles of Banking3	
	Managerial Economics	
BSAD 315	Financial Statement Analysis3	
ECON 315	Global Economy3	
FSMA 325	Financial Compliance and	
	Regulations3	
FSMA 415	Global Finance3	
FSMA 420	Financial Derivatives3	
FSMA 422	Risk Management3	

# 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. A minimum of 12 credit hours of the 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.

#### **MINOR REOUIREMENTS:**

1/111 / OTC 1112 Q C 11121 / 11 C (		
	Credits	
ACCT 245	Forensic Accounting3	
JUST 110	Criminal Law3	
JUST 485	Fraud Exam. and Investigation3	
SELECT THREE COURSES:		
ACCT 430	Auditing	
BSAD 319	Professional Ethics OR	
JUST 314	Ethics in Criminal Justice 3	
ECON 305	Economics of Crime	
FSMA 312	Financial Management 3	
FSMA 325	Financial Compliance and Reg3	
JUST 303	Investigative Interviews 3 credits	

### **Academic Minors**

# 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 101	Intro to Criminal Justice OR
LEST 101	The American Legal System3
JUST 303	Investigative Interviewing OR
ENGL 301	Professional Writing3
JUST 326	Threats to Homeland Security3
JUST 355	Public Safety Critical Incident
	Response3
JUST 375	Methods of Terrorism Through the
	Ages3
LEST 375	Law of Immigration & Border
	Control3

# 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 Systems3	
MINS 305	Customer Relationship Management3	
MINS 315	Decision Support Systems3	
MINS 425	Enterprise Resource Planning3	
MINS 430	Data and Knowledge Management3	
SELECT ONE COURSE		
BSAD 345	Technological Innovations and	
	Entrepreneurship3	
BSAD 372	E-Commerce3	
BSAD 373	International Business Management .3	
BSAD 375	Leadership and Change3	
CITA 330	Emerging Information Technology	
	Applications3	
CITA 400	Quantitative Approaches to	
	Management3	
CITA 460	Information Technology and	
	Networked Economy3	

# Marketing Management

The Marketing Management Minor provides a path for students who wish to expand and enhance their marketing skillset. The areas of focus include: advertising and promotion, 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 degree program offered at SUNY Canton, though it is best suited for business and finance majors. Students are encouraged to enroll in the minor as early as possible to ensure efficient pairing of the Marketing Management Minor with the student's respective major.

### MINOR REQUIREMENTS:

		Credits
BSAD 220	Principles of Retailing	3
BSAD 222	Principles of Selling	3
BSAD 325	Consumer Behavior	3
BSAD 350	Marketing	3
SELECT TW	VO ELECTIVES	
(One electiv	ve must be a 300/400 upper level	course)
BSAD 100	Introduction to Business OR	
RSAD 201	Business Law I	3

BSAD 225	Advertising & Promotion3
BSAD 330	Sales Management3
SPMT 307	Sports Marketing3
BSAD 372	E-Commerce <i>3</i>

### **M**ATHEMATICS

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:

<b>CORE REQ</b>	UIREMENTS	Credits
MATH 161	Calculus I	4
MATH 162	Calculus II	4
MATH 141	Statistics I	3
	HREE COURSES nust be MATH designated)	
MATH 341	Statistics II	3
MATH 263	Calculus III	4
MATH 264	Differential Equations	3
MATH 361	Linear Algebra	3
MATH 351	Discrete Mathematics	3
MATH 371	Graph Theory	3
	Elective from other disciplines	

\*Business, computer, engineering, physics courses in which mathematics plays a significant role may be selected with approval by the mathematics department

# VETERINARY SERVICES MANAGEMENT

The Veterinary Services Management 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 I3
BSAD 310	Human Resource Management3
VSCT 104	Veterinary Office Practices1
VSCT 301	Veterinary Hospital Management I3
VSCT 302	Veterinary Hospital Management II3
VSCT 401	Issues & Perspectives in Veterinary
	Medicine3

## GENDER STUDIES

The Women's Studies Minor is committed to broadening women's and men's knowledge and awareness of issues concerning or related to women. From an interdisciplinary approach, the minor provides a variety of courses that emphasize the female experience from both national and global perspectives.

#### MINOR REQUIREMENTS:

	=		
	Credits		
WMST 201	Intro to Women's Studies3		
WMST 401	Capstone Proj. in Women's Studies3		
SELECT FOUR COURSES			
ENGL 330	Women in Literature3		
HIST 204	U.S. Immigration History Through		
	Race, Class and Gender3		
HIST 304	U.S. Women's History3		
SOCI 305	Gender in the Media3		
SOCI 313	Women and Aging3		

# WRITING AND COMMUNICATION

The Minor in Writing and Communication trains students in the 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:

MINOR REQUIREMENTS:					
	Credits				
HUMANIT	HUMANITIES				
ENGL 202	Creative Non-Fiction3				
ENGL 221	Creative Writing3				
ENGL 310	Writing Your Life: Form & Function				
	in Memoirs3				
ENGL 315	Short Fiction: The Art of the Tale3				
HUMA189	Acting and Improvisation3				
	Art History B.C. to the Renaissance .3				
HUMA 202	Art History Renaissance to Present3				
SPCH 104	Introduction to Speech3				
VISUAL CO	OMMUNICATION/NEW MEDIA				
GMMD 102	2Introduction to Design3				
	Issues in New Media Journalism3				
CITA 112					
	Presentations1				
BUSINESS	PROFESSIONS PROFESSIONS				
BSAD 340	Management Communications3				
ENGL 301	Professional Writing and				
	Communication3				
ENGL 309	Journalism3				
LEST 330	Legal Writing3				

### POLICE ACADEMY PROGRAM

#### WAYS IN WHICH ONE MAY ENTER THE ACADEMY:

- Become a full-time student at SUNY
  Canton and enroll in the Criminal Justice curriculum with the Police Academy
  curriculum coordinator. The Academy is
  currently offered in the spring semester
  only. The Academy is worth up to 12
  college credits toward the associate degree
  in Criminal Justice and 15 college credits
  toward the bachelor degree in Criminal
  Investigation or Law Enforcement Leadership for all full-time tuition-paying
  cadets.
- Be hired and sworn as a full-time police officer of a law enforcement agency.
- Be sworn in as a part-time police officer and carried on the Workmen's Compensation of the employing police agency.
- Enroll as a non-degree student in Pre-Employment for Basic Course for Police Officers.
- \* Attending SUNY Canton is not a guarantee that you may attend the Police Academy. Entry is competitive, space is limited, and applicants must meet all entry requirements.

#### **ACADEMICS:**

Student cadets must meet admissions requirements for full-time students and must have the approval of the Academy Director.

#### APPLICATION:

The application and all forms (available at www.canton.edu/academy) must be completed and returned to the Director of the Police Academy at SUNY Canton. A statement of physical fitness, signed by a physician, must accompany the application. Application for spring enrollment in the Academy should be submitted by October 1. Any deception on the application is grounds for rejection. A thorough background investigation may be conducted on the applicant after completing an oral interview by the Academy Board of Directors.

An applicant may not be admitted to the Academy if the investigation discloses unsuitability for a law enforcement career due to criminal behavior, alcohol or controlled substance abuse, poor driving record, lack of integrity, inappropriate financial problems, or other evidence of a bad attitude. Applying to the Academy is no guarantee of acceptance. If you realize you are not acceptable for hiring as a police officer, do not apply to the Academy. In case of doubt as to your suitability, ask your local police chief.

#### INTERVIEW:

The applicant will undergo at least one interview conducted by the law enforcement executives of the county. This interview will be conducted prior to completion of the background investigation and determines whether or not the applicant is accepted into the Academy.

#### PHYSICAL FITNESS:

Physical fitness should be a lifelong goal of a law enforcement officer and is stressed in the Academy. In order to be admitted to the Academy, the cadet must pass the current Cooper testing standards for police officers. If you know you are out of shape, do not wait until the Academy starts to begin to correct the condition.

#### COSTS:

Cost depends on your status upon entry. Veterans benefits and financial aid may apply. Check with the Financial Aid Office of the College.

 You pay the usual tuition rates as a fulltime student including all fees. Costs of books and anticipated lab fees for student manuals totals approximately \$500.00 and uniforms (including boots) approximately \$200.00.

#### AGE:

Please inquire with the Director of the Police Academy.

#### **MEDICAL FITNESS:**

You must be medically fit to be a police officer. Individual police departments determine what is acceptable in regard to eyesight and injuries, such as trick knees and shoulders. It is your responsibility to obtain medical certification that you are fit to perform the physical training in the Academy. It is your responsibility to determine if your eyesight and any disabilities disqualify you from being hired as a police officer. In case of doubt, ask your local police chief.

- Graduation from the Academy is not a guarantee of a job in law enforcement.
   You must still meet all the criteria of the hiring law enforcement agency (i.e. score well in the civil service exam and be medically and morally fit).
- If you are not hired within two years, you may have to take the refresher course. The Academy will not substitute for the State Police, Environmental Conservation, or Park Police academies, or the academies of larger municipalities such as New York City, however your chances of employment are increased by successfully completing the Police Academy. The Academy curriculum and instructors are approved by the New York State Department of Criminal Justice Services.
- If you fail in the Academy either academically, physically, or through insufficient attendance, college policies regarding refunds apply. Pre-employment Phase 1 Cadets will not be certified as Police Officers by the State and/or College. If you are in the Academy for college credit and fail, the Criminal Justice curriculum coordinator will evaluate the work completed for credit on a case by case basis.

The Academy information along with the application form can be obtained from the college website: www.canton.edu/ academy.

### ENVIRONMENTAL SCIENCE AND FORESTRY—1+1 with SUNY-ESF, Wanakena

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 years<sup>1</sup>.

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.

<sup>1</sup>Some curricula may require cross-registration to complete requirements.

## FOREST TECHNOLOGY—Cooperative Program with SUNY ESF

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 I4
ECON 101	Principles of Macroeconomics**3
ENGL 101	Expository Writing3
	General Elective*3
MATH 106	Intermediate Algebra OR
MATH 121	College Algebra OR
MATH 123	Pre-Calculus Algebra3-4
	16-17

Semester II	
BIOL 155	College Biology II***4
ENGL 202	Creative Non-Fiction OR
	Writing Intensive English3
MATH 121	College Algebra OR
MATH 123	Pre-Calculus Algebra OR
	General Elective
	General Elective3
	General Elective (GER 3,4,5,6,7)*3
	16-17

- \* HIST 103 or HIST 105 strongly recommended as a General Elective
- \*\*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
  1) must take MATH 123 in Semester I or II; 2)
  take PHYS 121/125 in Semester I or II; 3) are not
  required to take a second BIOL course.

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 ENGL 101, BIOL 150, CHEM 150, PHYS 121 with PHYS 125 and MATH 121 in first semester; ENGL 221, BIOL 155, MATH 161, HIST 105 and ECON 101 in second semester.

## 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.



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-Mathematics; GER 2-Natural Sciences; GER 3-Social Sciences; GER 4-American History; GER 5-Western Civilization; GER 6-Other World Civilizations; GER 7-Humanities; GER 8-The Arts; GER 9-Foreign Language; GER 10-Basic Communication

	Page			Page
ABAP	Applied Psychology112	HIST	History	152
ACCT	Accounting114	HLTH	Health-Related	153
ACHP	Air Conditioning115	<b>HSMB</b>	Health Care Management	154
ANTH	Anthropology117	HUMA	Humanities	155
AREA	Alternative and Renewable Energy Systems117		Independent Study	155
ARTS	Arts118	HUSV	Human Services	155
ASTR	Astronomy118	INTL	Study Abroad	155
AUTO	Automotive119	JUST	Criminal Justice/Investigation/Law Enforcer	nent.156
BASK	Academic Development120	LEST	Legal Studies	
BIOL	Biology120	LPNC	Licensed Practical Nursing	
BSAD	Business/Management121	MATH	Mathematics	162
CHEM	Chemistry125	MECH	Mechanical	164
CITA	Computer126	MFGT	Manufacturing	166
CONS	Civil/Construction129	MINS	Management	166
DHYG	Dental Hygiene133	MSPT	Powersports	166
EADM	Emergency Management136	NURS	Nursing	167
ECHD	Early Childhood137	PHSC	Physcial Science	168
ECON	Economics	PHTA	Physical Therapist Assistant	169
EDUC	Education139	PHYS	Physics	170
ELEC	Electrical	POLS	Political Science	171
ENGL	English142	PSYC	Psychology	172
ENGS	Engineering Science145	SOCI	Sociology	173
ESCI	Environmental Science145	SOET	School of Engineering Technology	174
<b>ESOL</b>	English as a Second Language146	SPAN	Spanish	174
FREN	French146	SPCH	Speech	175
FSAD	Funeral Services146	SPMT	Sports Management	175
FSMA	Finance147	SSCI	Social Science	177
FYEP	First Year Experience149	TMMA	Facilities Operation	177
GEOG	Geography149	VAST	Veterinary Assisting	177
GEOL	Geology149	VSCT	Veterinary Technology	178
GMMD	Graphic and Multimedia Design149	WMST	Women's Studies	180
HEFI	Health and Fitness Promotion151			

#### **ABAP 135**

## PARENTING KNOWLEDGE AND SKILLS Fall/Spring, 3 credit hours

This course examines the application of the natural science and technology of behavior to improvements both in knowledge of parenting and in child rearing 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 is included. Three hours lecture per week.

## ABAP 245 INTRODUCTION TO THE SCIENCE AND TECHNOLOGY OF BEHAVIOR

Fall/Spring, 3 credit hours GER 3

This course introduces the natural science and technology of behavior, behaviorology, encompassing the areas of fundamental principles, basic methods and measurements, and elementary technologies of behavior analysis including techniques applied in prevention and intervention settings, plus historical and philosophical perspectives, ethics, and current trends. Three hours lecture per week.

#### ABAP 310 COMPANION ANIMAL BEHAVIOR TRAINING

Fall/Spring, 3 credit hours

This course introduces the contributions of the natural science of behavior, behaviorology, to the area of animal behavior training. Students (a) learn the successful, non–coercive animal training practices, derived from basic principles that are used by professional animal trainers around the world, and (b) learn how to teach the owners of companion animals how to train their pets. After reviewing basic principles and the significance of species differences, relevant practices are differentially applied to the pro–active, non–coercive, positive, and effective

### Course Descriptions: APPLIED PSYCHOLOGY

behavior training of four representative companion animal species: (a) cats, (b) dogs, (c) birds, and (d) horses. The generic application of these non–coercive practices to training other species also receives attention. Three hours of lecture per week. Prerequisites: Introduction to the Science and Technology of Behavior (ABAP 245) or Companion Animal Behavior (VSCT 102), with Human Companion Animal Bond (VSCT 100) highly recommended, or permission of instructor.

#### ABAP 345 APPLIED SCIENCE AND TECHNOLOGY OF BEHAVIOR

Fall/Spring, 3 credit hours

Common problematic human behaviors from a range of ordinary settings are analyzed along with the accessible independent variables of which these behaviors are a function as discovered by the natural science of behavior, behaviorology. Together, these are examined for prevention and solutions through the basic behavior/environment engineering applications that are derived from basic principles and techniques. Also considered are (a) the historical circumstances leading to these applications, (b) the value in design over accident or chance in the control of individual behavior and cultural practices, and (c) the place of ethics in considering and solving behavior problems. Three hours lecture per week. Prerequisite: Introduction to the Science and Technology of Behavior (ABAP 245) or permission of instructor.

#### ABAP 365 BEHAVIOR ENGINEERING: REHABILITATION

Fall/Spring, 3 credit hours

This course examines the application of the natural science and technology of behavior, behaviorology, to foster improvements in human interactions and success rates in institutional rehabilitation settings such as hospitals and prisons. The scientific basis of punishment that often informs many practices in such settings is covered along with rehabilitation considerations focused on both adult and youth clients or offenders. The course takes a systematic and data-based orientation to the organization and management of hospital or corrections personnel and institutions, and patient/prisoner rehabilitation. The development of behavior management-related knowledge and skills for application in everyday situations in institutional rehabilitation settings is an integral course component. Three hours lecture per week. Prerequisite: Introduction to the Science and Technology of Behavior (ABAP 245) or Correctional Philosophy (JUST 105), or permission of instructor.

#### ABAP 375 BASIC AUTISM ABA METHODS Fall/Spring, 3 credit hours

This course examines the application of the natural science and technology of behavior, behaviorology, to the interventions for children with autism using basic Applied Behavior Analysis (ABA) methods. Exercising a systematic and data-based

orientation, the course topics include: (a) the evaluation of different approaches for effectiveness, (b) the skills to be taught to children with autism, (c) the behavior engineering practices and skills needed to teach autistic children effectively, (d) the different roles of professionals and paraprofessionals involved in autism intervention efforts, (e) the organizational and legal supports available to autistic children and their families, (f) the roles of different autism treatment team members, (g) the organizational and legal interactions between families with autistic children and their local schools, and (h) the answers to the most common questions asked by parents of autistic children. Examination of actual autism training curricula, programs, practices, data sheets, settings, and case histories are integral parts of the course. Three hours lecture per week. Prerequisites: Introduction to the Science and Technology of Behavior (ABAP 245) with Applied Science and Technology of Behavior (ABAP 345) recommended, or permission of instructor.

## ABAP 380 INTRODUCTION TO VERBAL BEHAVIOR ANALYSIS AND APPLICATIONS

Fall/Spring, 3 credit hours

Based on natural science principles and practices, this course introduces students to (a) the behaviorological analysis of verbal behavior/language, (b) the historical context in which verbal behavior analysis arose, and (c) some applications of verbal behavior analysis especially as it is applied to enhance the acquisition of verbal behavior/language, by multi-language students or persons with developmental disabilities.

Covered analysis topics include such fundamental concepts as (a) differentiating verbal and nonverbal behavior, (b) the verbal community, (c) mediated reinforcement, (d) the basic verbal behaviors called mands, tacts, intraverbals, codics, and duplics, (e) various extensions of these elementary verbal operants, (f) the most common variables of which verbal operants are a function, (g) some of the ways these variables combine in the multiple control of complex verbal behaviors, (h) response products, (i) point-to-point correspondence, (j) formal similarity, (k) thematic and formal controls over verbal behavior and (l) the ways the verbal community teaches speakers to respond verbally to their private experiences. Three hours lecture per week. Prerequisites: Introduction to the Science and Technology of Behavior (ABAP 245) and 30 credit hours earned, or permission of instructor.

#### ABAP 385 ADV SCIENCE & TECHNOLOGY OF BEHAVIOR I

Fall/Spring, 3 credit hours

This first course of a two course sequence covers in detail the basic variables of which the behavior of humans and other animals is a function, as discovered from the natural science perspective and with the emphasis on increasingly complex human behavior. Included is not only the wide range of pertinent and accessible environment—behavior functional relations, but also the naturalistic philo-

sophical foundations of the behaviorology (science and technology of behavior) discipline as well as the research methodology involved in discovering the independent variables in these relations and engineering them into sophisticated applications and interventions beneficial to humanity. Course topics include (a) classifying behavior, (b) avoiding explanatory fictions and analytical fallacies, (c) experimentally manipulating independent variables of behavior, (d) measuring, recording, graphing, and interpreting behavior-related data, and (e) turning the experimentation-based prediction and control of behavior into beneficial behavior engineering practices emphasizing postcedent processes. Three lecture hours per week. Prerequisites: Introduction to the Science and Technology of Behavior (ABAP 245) and 60 credit hours, or permission of instructor.

#### ABAP 400 SEMINAR IN APPLIED BEHAVIOR ANALYSIS

Fall/Spring/Summer, 3 credit hours, may be repeated 4 times for credit

In this course the student studies the current disciplinary applied research literature containing relevant interventions while engaging in supervised practicum hours applying the relevant behaviorological disciplinary principles and practices to interventions with clients in the practicum setting. Three lecture hours per week. Prerequisites: Applied Science and Technology of Behavior (ABAP 345) and 60 credit hours and must secure permission of instructor. Corequisite: Practicum in Applied Behavior Analysis (ABAP 401) or permission of instructor.

#### ABAP 401 PRACTICUM IN APPLIED BEHAVIOR ANALYSIS

Fall/Spring/Summer, 3 credit hours, may be repeated 4 times for credit

In this course the student studies the current disciplinary applied research literature containing relevant interventions while engaging in supervised practicum hours applying the relevant behaviorological disciplinary principles and practices to interventions with clients in the practicum setting. One hundred and twenty practicum hours per semester. Prerequisites: Applied Science and Technology of Behavior (ABAP 345) and 60 credit hours and must secure permission of instructor. Corequisite: Seminar in Applied Behavior Analysis (ABAP 400) or permission of instructor.

#### ABAP 415 BEHAVIOROLOGICAL THANATOLOGY AND DIGNIFIED DYING

Fall/Spring, 3 credit hours

With an emphasis on the terminally ill and enhancing their dignity, this course examines the application of the natural science and technology of behavior, behaviorology, to the question of how we can improve end–of–life interactions between the dying and society, between the increasing numbers of the terminally ill and their survivors, between

### Course Descriptions: APPLIED PSYCHOLOGY, ACCOUNTING

ourselves and our loved ones at those difficult times. The course first covers the scientific understanding of coercion and punishment as these inform many past and current social practices in such situations. The course then considers a range of scientifically grounded alternative, proactive practices capable of increasing and maintaining the human dignity of all parties in these circumstances. Which professional group (e.g., medical doctors, hospice personnel, funeral directors, behaviorologists) might best organize these improvements and new practices is explored. The historical context, and social contingencies affecting new practices, are included in the consideration of how to move from old to new practices. Three lecture hours per week. Prerequisites: Introduction to the Science and Technology of Behavior (ABAP 245) or Human Response to Death (MORT 227), and 60 credit hours, or permission of instructor.

# ABAP 455 PERFORMANCE MANAGEMENT AND PREVENTING WORKPLACE VIOLENCE Fall/Spring, 3 credit hours

This course examines the application of the natural science and technology of behavior, behaviorology, to the understanding, prevention, and deterrence of workplace violence, and does so on three levels: The course examines the scientific analysis of punishment as punishment informs many practices present in workplace settings that match the violence-prone profile. Next, the course emphasizes the acquisition and application of the behavior management-related knowledge and skills known as performance management, that are relevant to changing the circumstances that lead to workplace violence so as to prevent its possible occurrence. Then, the course extends its systematic and databased orientation from the understanding of workplace violence, and its prevention, to developing, comparing, applying, and evaluating policies and procedures to intervene in the dynamics, indicators, types, and triggers of workplace violence to deter its imminent occurrence. These three levels are considered for all workplaces including those in industrial/ manufacturing, organizational, marketing, financial, institutional, or retail business settings. Three hours lecture per week. Prerequisites Introduction to the Science and Technology of Behavior (ABAP 245) or Human Resource Management (BSAD 310) or Management Communications (BSAD 340) or Organization Psychology (PSYC 360), or permission of instructor.

#### ABAP 465 CLASSROOM MANAGEMENT AND PREVENTING SCHOOL VIOLENCE Fall/Spring, 3 credit hours

This course covers the application of the natural science and technology of behavior, behaviorology, to classroom management practices to prevent school violence. This course first examines the scientific understanding of punishment and coercion, because these provide the bases of many school practices that, unintentionally, prompt violence. Through a systematic and data-based orientation,

the course next examines the positive, proactive, non-coercive classroom management practices that school teachers and staff can personally implementespecially in the classroom but also in the cafeteria, and gym, and on the bus, and playground-to reduce and prevent the occurrence of all kinds and levels of school violence while also enhancing the effectiveness of instruction. Then, the course examines the school-wide policies and procedures (as encouraged by legislation such as the New York Safe Schools Act) that can be implemented to deter incipient school violence. Developing behavior management-related skills, especially those applicable to changing the circumstances that lead to school violence so as to reduce that violence, is an integral course component. Three hours lecture per week. Prerequisites: Introduction to the Science and Technology of Behavior (ABAP 245) or Principles of Education (EDUC 210), or permission of instructor.

#### ABAP 485 ADV SCIENCE & TECHNOLOGY OF BEHAVIOR II

Fall/Spring, 3 credit hours

This second course of a two course sequence covers in detail more of the basic variables of which the behavior of humans and other animals is a function, as discovered from the natural science perspective and with the emphasis on increasingly complex human behavior. Included is not only the wide range of pertinent and accessible environment-behavior functional relations, but also the naturalistic philosophical foundations of the behaviorology discipline as well as the research methodology involved in discovering the independent variables in these relations and engineering them into sophisticated applications and interventions beneficial to humanity. Course topics include (a) multi-term contingencies, (b) function-altering stimuli, (c) stimulus equivalences, (d) reinforcement schedules plus adjunctive behavior, (e) aversive controls plus more effective alternatives, (f) applied behavior research plus behavioral objectives, (g) gradual change in both stimuli (fading) and responses (shaping), (h) some complex cases (including attitudes, values, rights, ethics, morals, and beliefs), and (i) verbal behavior. A preview of the more complex disciplinary topics of consciousness, personhood, life, culture, reality, and intellectual evolution (biological and cultural) is also part of this course. Three lecture hours per week. Prerequisite: Advanced Science and Technology of Behavior I (ABAP 385), or permission of instructor.

#### ACCT 101 FOUNDATIONS OF FINANCIAL ACCOUNTING

Fall/Spring, 4 credit hours

Basic accounting concepts and principles for the sole proprietorship and merchandising company are introduced with a concentrated emphasis on the accounting cycle and the preparation of financial statements. Four hours lecture per week.

#### ACCT 102 FOUNDATIONS OF MANAGERIAL ACCOUNTING

Fall/Spring, 3 credit hours

The basic principles of accounting are continued with their application to partnerships and corporations. Topics included are inventories, depreciation, payroll, formation, operation and liquidation of partnerships and corporations. Three hours lecture per week. Prerequisite: Foundations of Financial Accounting (ACCT 101) or permission of instructor.

#### ACCT 104 SURVEY OF ACCOUNTING

Fall/Spring, 4 credit hours

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 Management.) Four hours lecture per week.

#### ACCT 242 ACCOUNTING FOR GOVERNMENT AND NONPROFIT ORGANIZATIONS

Fall/Spring 3 credits hours

A study of governmental, not-for-profit, healthcare and university entities with emphasis on fund accounting, budgets and financial reporting. Three hours lecture per week. Prerequisites: Foundations of Financial Accounting (ACCT 101) and knowledge of spreadsheets or permission of instructor.

#### ACCT 245 FORENSIC ACCOUNTING Fall/Spring, 3 credit hours

Forensic Accounting is concerned with the detection and prevention of financial fraud and white-collar crime activities. This course will identify areas of financial risk, develop internal control policies and procedures, as well as define the role of the forensic accountant in the courtroom. Three hours lecture per week. Prerequisites: Foundations of Financial Accounting (ACCT 101) or Survey of Accounting (ACCT 104) or permission of instructor.

## ACCT 300 INTERMEDIATE ACCOUNTING I Fall, 3 credit hours

This 3 credit course is designed to provide the student with knowledge and skills basic to accounting theory and practice and advanced problems pertaining to the foundations of Financial Accounting and the Primary Activities of a Business. Major topics include: financial reporting, review of the accounting cycle, balance sheet and notes to the financial statement, the income statement, the statement of cash flows, earnings management, revenue/receivables/cash cycle, revenue recognition, inventory and cost of goods sold, and debt financing. The essential interrelationship between

### Course Descriptions: ACCOUNTING, AIR CONDITIONING

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. Three lecture hours per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102) or permission of instructor.

#### ACCT 302 INTERMEDIATE ACCOUNTING II Spring, 3 credit hours

This 3 credit course is designed to provide the student with a real world perspective that links accounting functions with the activities of business. This course focuses on how accounting is intrinsically linked to central business activities: Operating, Financing and Investing. Major topics include financing activities, investing activities, leases, income taxes, interim reporting, earnings per share, accounting changes and error correction. Intermediate Accounting II provides a thoroughly engaging and comprehensive learning experience that helps develop essential understanding, critical thinking, and analytical skills. Accounting's integral importance to an organization's decision-making capabilities is stressed and accounting is presented as an essential element in business decision-making. 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. Three lecture hours per week. Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

#### ACCT 305 ACCOUNTING THEORY & PRACTICE Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites/ corequisites: Intermediate Accounting I (ACCT 300), Management Communications (BSAD 340), Introduction to Information Technology (CITA 110), Introduction to Finance (FSMA 210), Inter-

mediate Algebra (MATH 106), or Math of Finance (MATH 108), or permission of instructor.

## ACCT 306 COST ACCOUNTING Fall, 3 credit hours

This course is designed to expose the student to formal systems of data compilation and reporting which are essential to formulating and achieving management goals and objectives in both manufacturing and service enterprises. Three lecture hours per week. Prerequisites: Intermediate Algebra (MATH 106), Math of Finance (MATH 108), or permission of instructor.

#### ACCT 310 ACCOUNTING INFORMATION SYSTEMS Fall/Spring, 3 credit hours

This course will utilize an accounting software system complimented by a manual accounting information system. 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 E-business sets the stage for this course. Students will prepare the necessary documents, journal entries, reconcile accounts, and prepare financial statements for an entire accounting cycle. Three hours lecture per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102), or permission of the instructor.

## ACCT 335 INDIVIDUAL TAXATION Fall, 3 credit hours

This course is designed to introduce students to the Internal Revenue Code, preparation of tax returns for individuals and small businesses. The course prepares students to participate in the IRS Volunteer Income Tax Assistance (VITA) program. Three hours lecture per week. Prerequisites: Intermediate Algebra (MATH 106) and Introduction to Information Technology (CITA 110), or permission of the instructor.

#### ACCT 410 INTERNATIONAL ACCOUNTING Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102), Intermediate Algebra (MATH 106), Principles of Macroeconomics (ECON 101), or permission of instructor.

#### ACCT 430 AUDITING

#### Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

#### ACCT 440 ADVANCED ACCOUNTING

#### Fall/Spring, 3 credit hours

Advanced accounting issues include the following topics: consolidations, mergers and acquisitions, governmental and nonprofit organizations, foreign currency transactions, and partnerships. Three hours lecture per week. Prerequisites: Intermediate Accounting I (ACCT 300) or permission of instructor.

#### ACCT 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ACCOUNTING

#### Fall/Spring, 1-4 credit hours

Special Topics in Accounting will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available. Prerequisite: permission of the instructor.

#### ACHP 103 REFRIGERATION AND AIR CONDITIONING SERVICES I

#### Fall, 7 credit hours

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. Use of hand and power tools will be stressed in laboratory work. Students will cut, bend, solder, braze, flare, and swage cooper tubing. Flowing nitrogen will be stressed during brazing operations. Four hours lecture, nine hours laboratory per week.

#### ACHP 104 REFRIGERATION AND AIR CONDITIONING SERVICES II

#### Spring, 7 credit hours

Applications of refrigeration and air conditioning systems are presented along with heat gain calculation, air distribution and filtration and controls. Complete systems including split Dx air conditioners, heat pumps, and packaged systems will be installed. Some sheet metal layout and fabrication will also be performed. Four hours lecture, nine hours laboratory per week. Prerequisite: Refrigeration and Air Conditioning Services I (ACHP 103) or permission of instructor.

### Course Descriptions: AIR CONDITIONING

#### ACHP 105 REFRIGERATION SYSTEM DESIGN Spring, 2 credit hours

The refrigeration system and its components are studied in detail. Components will be sized and selected to meet application requirements and then system equilibrium will be determined. Two hours lecture per week. Prerequisite: Refrigeration and Air Conditioning Services I (ACHP 103); Corequisite: Refrigeration and Air Conditioning Services II (ACHP 104) or permission of instructor.

#### ACHP 171 HEATING AND PLUMBING PRINCIPLES AND PRACTICE I

Fall, 7 credit hours

The fundamentals of heating equipment and practices; selection, use and care of hand and power tools; piping fabrication of copper, steel, cast iron and plastic pipe; oil burner boiler installation and service; drainage, waste and vent plumbing; basic sheet metal practice; well pumps and accessories. CERTIFICATE/AAS ELECTIVE CREDIT ONLY. Four hours lecture, nine hours laboratory per week.

#### ACHP 172 HEATING AND PLUMBING PRINCIPLES AND PRACTICE II

Spring, 8 credit hours

Gas burner boiler installations with zoning; furnace installation and service; bathroom and kitchen plumbing installation; sheet metal layout and fabrication; heat loss and gain calculations; electrical schematics, controls, troubleshooting; duct sizing and installation. CERTIFICATE/AAS ELECTIVE CREDIT ONLY. Five hours lecture, nine hours laboratory per week. Prerequisite: Heating & Plumbing Principles and Practice I (ACHP 171) or permission of instructor.

#### ACHP 181 INTRODUCTION TO ENVIRONMENTAL TECHNOLOGY

Spring, 3 credit hours

This course provides the student without a technical background an opportunity to explore the broad field of Environmental Technology. This includes basic problem solving as applied to situations occurring in everyday living environments. Current issues such as indoor air quality, CFC's, radon, and Legionnaires Disease are discussed and solutions presented through proper design. Each student will be introduced to the various phases of building construction and maintenance so he or she will be able to make rational decisions with regard to building environmental conditions. Three hours lecture per week.

#### ACHP 215 PLUMBING DESIGN

Fall, 3 credit hours

The theory of sizing and design of hot and cold water lines, drainage and vent lines for residential and commercial sanitary systems. Also a study of basic hydraulics and fluid flow with emphasis on application of various types of water pumping devices. Three hours lecture per week.

#### ACHP 233 PIPE DRAFTING Fall, 1 credit hour

Projects include isometric, elevation, plan and detail drawings of piping systems. A computer-aided drafting (CAD) project of a piping system is also included in the course. Three hours laboratory per week. Prerequisite: Engineering Drawing (MECH 118) or permission of instructor.

#### ACHP 243 AIR CONDITIONING I

Fall, 3 credit hours

The properties of air and water vapor mixtures are determined by calculation and by the use of psychometric charts. Air conditioning processes are analyzed by use of the psychometric chart. Heating loads are calculated for commercial and residential structures. The performance of air conditioning systems and the use of instruments is covered in the laboratory. Two hours lecture, three hours laboratory per week. Prerequisite: Intro to HVAC-R (MECH 103) or permission of instructor.

#### ACHP 244 AIR CONDITIONING II

Spring, 3 credit hours

Cooling loads are calculated for various types of commercial structures. Computers are used to calculate loads. Air conditioning equipment and systems are studied to determine their application to meet load, comfort and energy conservation requirements. The laboratory portion of the course includes the determination, with instruments, of the performance characteristics of cooling coils, heating coils, a water chiller, cooling tower, etc. Two hours lecture, three hours laboratory per week. Prerequisite: Air Conditioning I (ACHP 243) or permission of instructor.

#### ACHP 253 DOMESTIC AND COMMERCIAL HEATING I

Fall, 4 credit hours

Basic principles of heating systems are studied including continuity relations, the flow energy equation and duct and piping systems design. The equal friction method for piping system design is presented as well as the modified equal pressure, equal friction and static pressure regain methods of duct design. Solutions of both duct systems and piping systems are calculated by manual methods and also by a computer program. Theories presented in lecture are backed up by experiments in the laboratory portion. Flow measurement of both air and water are also covered. Three hours lecture, three hours laboratory per week. Prerequisite: Intro to HVAC-R (MECH 103) or permission of instructor.

#### ACHP 254 DOMESTIC AND COMMERCIAL HEATING II

Spring, 4 credit hours

The selection and application of heating equipment is presented. Furnaces, boilers, pumps, fans, and heat pumps are among the equipment studied.

Integration of layout studied in Domestic and Commercial Heating I (ACHP 253) is stressed. Additional topics covered are: ventilation requirements, proper air distribution, balancing procedures (air & water), primary-secondary pumping, energy cost calculations and air filtration. Laboratory experiments are designed to emphasize the topics covered in lecture. Three hours lecture, three hours laboratory per week. Prerequisite: Domestic and Commercial Heating I (ACHP 253) or permission of instructor.

#### ACHP 264 AIR CONDITIONING SYSTEMS DESIGN Spring, 1 credit bour

Air conditioning systems are designed for specific buildings, equipment selected, working drawings made and specifications written. Three hours laboratory per week. Prerequisites: Pipe Drafting (ACHP 233), Air Conditioning I (ACHP 243), Domestic and Commercial Heating I (ACHP 253) or permission of instructor.

## ACHP 306 ENERGY SYSTEMS TECHNOLOGY Fall. 3 credit hours

Cooling, heating, ventilating, humidification, dehumidification, and cleaning equipment and systems as applied to buildings will be studied. Laboratory equipment will be used to demonstrate air conditioning processes, equipment, and systems. Human comfort requirements, indoor air quality, air conditioning loads, equipment maintenance schedules and energy conservation will be studied. Emphasis will be on maintaining a comfortable, healthy environment, economically and efficiently with well-maintained equipment. Topics to be covered will also include pump and fan curves, duct and piping systems design methods, constant volume and VAV systems, and hot water and steam heating systems. Three hours lecture per week. Prerequisites: Pre Calculus Algebra (MATH 123), General Physics II (PHYS 102).

#### ACHP 323 HVAC EQUIPMENT AND SELECTION Fall/Spring/Summer, 3 credit hours

This course includes the selection and layout of modern HVAC equipment for commercial buildings. Special concern is applied to ASHRAE Standards, codes and cost analysis. Three hours lecture per week. Prerequisites: Domestic and Commercial Heating II (ACHP 254), or permission of instructor.

#### ACHP 324 HVAC LOAD CALCULATION

Fall/Spring, 3 credit hours

This course introduces 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 lecture per week. Prerequisite: Refrigeration I (ACHP 101); Corequisites: Thermodynamics (MECH 342), Heat Transfer (MECH 343), or permission of instructor.

#### ACHP 401 BUILDING AUTOMATION SYSTEMS Fall, 3 credit hours

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. Three hours lecture per week. Prerequisite: Data Communications and Networking (CITA 200), and Energy Systems Tech. (ACHP 306) or Air Conditioning II (ACHP 244), or permission from instructor.

#### ACHP 412 ENERGY ANALYSIS AND AUDIT

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: HVAC Load Calculation & Energy Code (ACHP 324), or permission of instructor.

#### ACHP 415 COMMISSIONING OF MECHANICAL SYSTEMS

Fall/Spring, 3 credit hours

This course explores the modern building practice of implementing a quality-oriented process for achieving, verifying, and documenting that 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. Three hours lecture per week. Prerequisite: HVAC Load Calculation & Energy Code (ACHP 324), or permission of instructor.

#### ACHP 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN AIR CONDITIONING ENGINEERING TECHNOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Air Conditioning Engineering Technology will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available. Prerequisite: permission of the instructor.

#### ANTH 101 INTRODUCTION TO PHYSICAL ANTHROPOLOGY AND ARCHAEOLOGY Fall/Spring, 3 credit hours

Introduction to Physical Anthropology and Archaeology provides an overview of the theory of evolution, the genetic basis of variation, the fossil record leading to and including human evolution, basic issues of method and theory in archaeology, selected topics in prehistory. Three hours lecture per week.

#### ANTH 102 INTRODUCTION TO CULTURAL ANTHROPOLOGY

Fall/Spring, 3 credit hours GER 3 & GER 6

A global, cross-cultural overview of the diversity of human organization, achievements and institutions. Emphasis will be placed on non-western, nonindustrialized societies and a regional development approach to selected cultural areas. The theory, concepts and methods of cultural anthropology will provide the foundation for understanding this diversity and the historic journey which has produced the mosaic of culture. Three hours lecture per week.

#### ANTH 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ANTHROPOLOGY

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in anthropology.

#### AREA 110 INTRODUCTION TO ALTERNATIVE ENERGY

Fall, 3 credit hours

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. Three hours lecture per week.

#### **AREA 224**

## RENEWABLE ENERGY ELECTRICAL CODE Fall/Spring, 3 credit hours

This course deals with the National Electrical Code (NEC) for renewable energy systems. The various aspects of the electrical code will be studied to ensure proper system design and installations. Safety issues as related to the various sections of the code will be emphasized. Three hours lecture per week. Prerequisites: Electricity (ELEC 261) or Electrical Construction and Maintenance I & II (ELEC 171

& ELEC 172) or permission of instructor.

#### AREA 300 FUEL CELLS

Fall/Spring, 3 credit hours

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: Thermodynamics (MECH 342), College Chemistry I (CHEM 105) and junior level status or permission of instructor.

#### AREA 303 WIND TURBINES Fall/Spring, 3 credit hours

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 citing of wind turbines. Prerequisites: Electricity (ELEC 261) and Electrical Energy Con-

version (ELEC 215) or permission of instructor.

#### AREA 310 BIOFUELS

Fall/Spring, 3 credit hours

This course covers alternative, renewable fuels derived from biological sources and their applications as an energy source for homes, industry and transportation. Wood, urban, and agricultural solid waste are discussed as potential sources of energy conversion. In addition, the production of methane and alcohol based fuels and their roles as a transportation fuel will lead to a re-discovery of opportunities to replace fossil-based fuels. Bio-diesel and vegetable oil topics are necessary to show a true alternate energy source for internal combustion engines. Throughout this course, students will examine both advantages and disadvantages of biofuels as an energy source. Prerequisites: Intro. to Chemistry (CHEM 101) and junior level status or permission of instructor.

#### AREA 320 EXPERIMENTATION & MEASUREMENT I Fall, 3 credit hours

In this laboratory course, 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. Three two-hour laboratories per week. Prerequisites: College Physics II (PHYS 122), Fluid Mechanics (MECH 241), Programming for Engineers (ENGS 102) or permission of instructor.

#### AREA 321 SOLAR ENERGY UTILIZATION Fall, 3 Credit hours

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. Three hours lecture per week. Prerequisite: Thermodynamics (MECH 342) or permission of instructor.

#### AREA 322 PASSIVE SOLAR BUILDING Spring, 3 Credit hours

Passive Solar Building explores the use of solar energy to passively heat and cool buildings. Topics include solar radiation, building heating and cooling loads, energy efficient design and construction, passive solar heating, proper implementation of thermal mass, and passive cooling. Three hours lecture per week. Prerequisites: Thermodynamics (MECH 342), Energy Systems Technology (ACHP 306), or permission of instructor.

#### AREA 323 PHOTOVOLTAIC SYSTEMS Fall, 3 Credit hours

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. Three hours lecture per week. Prerequisite: Thermodynamics (MECH 342) or permission of instructor.

## AREA 370 EXPERIMENTATION & MEASUREMENT II Spring, 3 credit hours

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. Three two-hour laboratories per week. Prerequisites: Experimentation & Measurement I (AREA 320) or permission of instructor.

#### AREA 420 ALTERNATIVE ENERGY DESIGN I Fall, 3 credit hours

Each student team will be required to apply engineering theory in the design of alternative energy systems for residential and commercial buildings. The experience provided in the laboratory projects will allow teams to assess critical factors affecting real applications in alternative energy. Three two-hour laboratories per week. Prerequisites: Experimentation & Measurement II (AREA 370) or permission of instructor.

#### AREA 470 ALTERNATIVE ENERGY DESIGN II Spring, 3 credit hours

This laboratory is a continuation of AREA 420, Alternative Energy Design I. Student teams will apply design theories to develop alternative energy systems for actual residential or commercial buildings. Using the experience gained from AREA 420, students will go to the site of the proposed alternative energy system to examine the critical factors for design consideration. This course will require periodic interim reports and a final report to be submitted to the instructor and the potential owners of the proposed system. Students will create a complete project design package by the end of the semester. Three two-hour laboratories per week. Prerequisites: Alternative Energy Design I (AREA 420) or permission of instructor.

#### ARES 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ALTERNATIVE & RENEWABLE ENERGY SYSTEMS

Fall/spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in alternative & renewable energy systems.

#### ARTS 101 INTRODUCTORY DRAWING

Fall/Spring, 3 credit hours 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 judgment. Two hours lecture, two hours laboratory per week.

#### ARTS 201

## ART HISTORY: B.C. TO 16TH CENTURY Fall, 3 credit hours GER 7 & 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. Three hours lecture per week.

#### ARTS 202

## ART HISTORY: 16TH TO 20TH CENTURY Spring, 3 credit hours GER 7 & 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, 3 credit hours 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. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) or permission of instructor.

## ARTS 204 INTRODUCTION TO PAINTING

Fall/Spring, 3 credits

GER 8

In introduction to painting students will practice basic approaches to watercolor, acrylic and oils, applying these techniques towards more accomplished works. Class work will include exercises, studies, and analysis of professional works, as well as the compilation of a painting portfolio. Two hours lectures, two hours studio laboratory per week.

#### ARTS 205 INTERMEDIATE DRAWING Fall/Spring, 3 credits hours

Intermediate Drawing sequentially builds on the skills, techniques and concepts introduced in HUMA 101. Through research and studio based assignments, including a visual journal, students will apply drawing media and techniques to advanced problems. Material covered includes mixed media, conceptual drawing, narrative drawing, digital drawing and storyboarding. Two hours lecture, two hours studio laboratory per week. Prerequisites: Introduction to Drawing (HUMA 101) or permission of instructor.

# ASTR 101-LECTURE, 3 CREDIT HOURS ASTR 102-LAB, 1 CREDIT HOUR ASTRONOMY OF THE SOLAR SYSTEM Fall 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 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. Recommended prerequisite: high school algebra or equivalent.

#### ASTR 103-LECTURE, 3 credit hours ASTR 104-LAB, 1 credit hour STELLAR ASTRONOMY

ng GFR 2

This is a survey course examining the structure, evolution and classification of stars. Topics covered will include the history of astronomy, the sun,

### Course Descriptions: ASTRONOMY, AUTOMOTIVE

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.

#### ASTR 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ASTRONOMY

Fall/Spring, 1-3 credit hours

Special Topics in Astronomy will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available.

#### AUTO 101 AUTOMOTIVE SERVICES

Fall, 2 credit hours

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.

#### AUTO 102 DIESEL ENGINES

Spring, 2 credit hours (elective)

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. One hour lecture, two hours laboratory per week. Prerequisite: Automotive Services & Lab (AUTO 101 & 111), or permission of instructor.

#### AUTO 103 AUTOMOTIVE AIR CONDITIONING

Spring, 2 credit hours (elective)

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. Prerequisite: Automotive Electrical Systems & Lab (AUTO 112 & 122), or permission of instructor.

#### AUTO 104 BASIC WELDING

Fall/Spring, 2 credit hours

This course includes all basic processes and procedures in joining and cutting ferrous and non-ferrous metals found in automotive/industrial applications using the latest tools and equipment. Focus will include safety, proper techniques, and quality

control. One hour lecture, two hours laboratory per week. Fall Semester, restricted to Automotive Technology students or permission of the instructor.

#### AUTO 111 AUTOMOTIVE SERVICES LABORATORY Fall, 1 credit hour

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. Corequisite: Automotive Services (AUTO 101) or permission of instructor.

#### AUTO 112 AUTOMOTIVE ELECTRICAL SYSTEMS Fall, 3 credit hours

A study of fundamental electrical relations and circuits as applied to the automobile. Topics include series, parallel, and series-parallel circuits; magnetism, direct and alternating current fundamentals; battery, charging, and starting, systems. Three hours lecture per week.

#### AUTO 113 ENGINE PERFORMANCE I

Spring, 3 credit hours

The classroom component of this course introduces the student to fuel and ignition systems. Basic electricity/electronic skills and knowledge are applied in addressing the theory involved in sophisticated electronic ignition and fuel-injection systems. Students study primary switching through secondary firing. Topics include basic circuitry, hall-effect and transistor theory, solenoids, fuel injection (both throttle body and multi-port) and electronic engine management (powertrain control). Three hours lecture per week. Prerequisite: Automotive Services & Lab (AUTO 101 & 111), Automotive Electrical Systems & Lab (AUTO 112 & 122), or permission of instructor.

#### AUTO 114 ENGINE PERFORMANCE I LABORATORY Spring, I credit hour

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 (CD-ROM-), while testing systems with digital volt/ohm meters and computer scanners. Fuel and powertrain control systems are diagnosed with the latest tools available. Three hours laboratory per week. Prerequisite or Corequisite: Engine Performance I (AUTO 113), or permission of instructor.

With the completion of both components of Engine Performance I, (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.

#### AUTO 122 AUTOMOTIVE ELECTRICAL SYSTEMS LABORATORY

Fall, 1 credit hour

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 (CD-ROM-). Testing involves batteries; series, parallel, and series-parallel circuits, as well as charging and starting systems component identification and service. Three hours laboratory per week. Prerequisite or Corequisite: Automotive Electrical Systems (AUTO 112), or permission of instructor.

#### AUTO 141 AUTOMOTIVE BRAKING SYSTEMS Spring, 3 credit hours

This course consists of theory and operation in the following automotive areas: clutch, manual transmissions, drivelines, and rear axle, as well as basic disc and drum braking systems. Three hours lecture per week. Prerequisite: Automotive Services (AUTO 101), or permission of instructor.

#### AUTO 144 AUTOMOTIVE BRAKING SYSTEMS LABORATORY

Spring, I credit hour

This course consists of service and repair in the following automotive areas: clutch, manual transmissions, drivelines, and rear axle, as well as basic disc and drum braking systems. Use of specialized service equipment and procedures is stressed in the laboratories. Three hours laboratory per week. Prerequisite or Corequisite: Automotive Services (AUTO 101) and (AUTO 111), Automotive Drivelines and Brakes (AUTO 141), or permission of instructor.

#### AUTO 212 AUTOMOTIVE ELECTRICAL SYSTEMS II Fall, 4 credit hours

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. Three hours of lecture and three hours of laboratory per week. Prerequisites: Automotive Electrical Systems (AUTO 112) or permission of instructor.

#### AUTO 213 ENGINE PERFORMANCE II Fall, 4 credit hours

This course begins where Engine Performance I terminates. Sophisticated engine control systems are studied which include distributorless ignition, electronic spark control and emission controls. The student learns and applies knowledge of the integration of the listed systems and the powertrain/engine control computer (PCM). Diagnosis and repair includes use of the latest tools and test equipment, digital volt/ohm meters, oscilloscopes, and interactive computer scanners. Students continually utilize the latest automotive reference materials in diagnosis

## Course Descriptions: AUTO, ACADEMIC DEVELOPMENT, BIOLOGY

and repair procedures. Three hours lecture, three hours laboratory per week. Prerequisites: Automotive Electrical Systems & Lab (AUTO 112 & 122), Engine Performance I & Lab (AUTO 113 & 114), or permission of instructor.

#### AUTO 214 AUTOMOTIVE COMPUTER SYSTEMS Spring, 3 credit hours

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. Two hours lecture, two hours laboratory per week. Prerequisites: Automotive Services (AUTO 101) and (AUTO 111), Automotive Electrical Systems & Lab (AUTO 112 & 122), Engine Performance II (AUTO 213), Internal Combustion Engines (AUTO 220), or permission of instructor.

#### AUTO 220 INTERNAL COMBUSTION ENGINES Fall, 4 credit hours

Concerns the principles of operation of the gasoline internal combustion engine. Each student participates in an actual engine overhaul, including measuring to factory specifications and machining operations with the latest tools and equipment. Designed for Automotive Technology majors principally, applicants from other curricula will be interviewed by department personnel. Tool kit required. Two hours lecture, four hours laboratory per week. Prerequisites: Automotive Services & Lab (AUTO 101 & 111), Automotive Electrical Systems & Lab (AUTO 112 & 122), Engine Performance I & Lab (AUTO 113 & 114), or permission of instructor.

#### AUTO 221 AUTOMATIC TRANSMISSIONS Spring, 4 credit hours

Fundamental principles of automatic transmissions including adjustments, repairs, and on--vehicle testing. Each student will participate in an actual overhaul of an automatic transmission. This project is tested for operation and efficiency on a transmission dynamometer. Three hours lecture, three hours laboratory per week. Prerequisites: Automotive Electrical Systems & Lab (AUTO 112 & 122), Engine Performance I & Lab (AUTO 113 & 114), Engine Performance II (AUTO 213), Automotive Drivelines and Brakes (AUTO 141) and (AUTO 144), or permission of instructor.

#### AUTO 225 MANUAL TRANSMISSIONS AND DRIVETRAIN

Fall, 3 credit hours

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. Three

hours lecture per week. Prerequisites: Automotive Services & Lab (AUTO 101 & 111), Automotive Braking Systems (AUTO 141), Automotive Braking Systems Lab (AUTO 144), Basic Welding (AUTO 104), or permission of instructor.

#### AUTO 230 SERVICE MANAGEMENT AND OPERATIONS

Spring, 1 credit hour

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. One hour lecture per week. Prerequisites: Automotive Electrical Systems (AUTO 112) and Engine Performance II (AUTO 213), or permission of instructor.

#### AUTO 241 SUSPENSION DESIGN AND SERVICES Fall, 2 credit bours

This course covers theory, diagnostic and service procedures used in suspension and steering systems. Two hours lecture per week. Prerequisite: Automotive Services (AUTO 101), or permission of instructor.

#### AUTO 282 SUSPENSION DESIGN AND SERVICES LABORATORY

Fall, I credit hour

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. Three hours laboratory per week. Prerequisite: Automotive Services (AUTO 101) and (AUTO 111), or permission of instructor.

#### AUTO 291-295 SPECIAL TOPICS IN AUTOMOTIVE TECHNOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Automotive Technology will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available. Prerequisite: permission of the instructor.

#### BASK 051 COLLEGE SUCCESS STRATEGIES Fall/Spring, 1 credit hour

This course is designed to help students successfully make the transition to college while developing a sense of responsibility for their own learning. Students will practice a set of learning strategies focusing on such topics as time management, note-taking, textbook reading/memory improvement, goal setting, test preparation/taking, and critical thinking. Students will learn and demonstrate basic

library research skill, computer skills, and explore/ identify personal learning styles, values, career choice, and attitudes toward diversity. Two hours lecture per week. Required of all first-time EOP students. Credit in some certificates only.

#### BASK 060 FRESHMAN SEMINAR

Fall/Spring, 1 credit hour

This course is designed to help students with the transition into college. Topics will include a study behavior inventory, goal setting, time management, campus resources, learning styles, test taking, note taking, memorization strategies, and other information useful in becoming a successful college student. Two hours laboratory per week. Admission into this class is by permission of the instructor. Graduation credit for some certificates only.

#### BASK 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ACADEMIC DEVELOPMENT

Fall/Spring, 1-4 equivalent credit hours

An introductory or more advanced exploration of topics not covered or only partially covered by other courses currently available. The course will be specified in the semester class schedule. Students may take two special topics courses for preparatory credit/credit as long as the topic is different.

## BIOL 101 INTRODUCTION TO BIOLOGY

Fall/Spring, 4 credit hours

GER 2

A study of the major concepts in the life sciences presented for the non-major. Subjects covered include an overview of the basic concepts of plants and animals, including human biology, with attention given to cellular processes and the relationship between form and function. Three hours lecture, two hours laboratory per week. The laboratory includes dissection of a representative vertebrate. Intended for students receiving less than 75 on the New York State Regents Biology examination and/or students not in a science-related program. This course is not transferrable as college-level general biology.

#### BIOL 117 HUMAN REPRODUCTION

Spring, 3 credit hours

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. Three hours lecture per week.

#### BIOL 150 COLLEGE BIOLOGY I

Fall, 4 credit hours

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.

### Course Descriptions: BIOLOGY

The laboratory includes the study of cells, osmosis, enzymes, cellular respiration, genetics, molecular techniques, and the dissection of a representative mammal. Three hours lecture, three hours laboratory per week. Prerequisite: New York State Regents Biology examination grade of 75 or above or Introduction to Biology (BIOL 101); AND HS chemistry or Introduction to Chemistry (CHEM 101/100) or Investigative Chemistry (CHEM 107/108); or permission of instructor.

#### BIOL 155 COLLEGE BIOLOGY II

Spring, 4 credit hours

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, nerve physiology, homeostasis and chemical signals. The laboratory includes structural and functional studies of representative plants and animals, bacterial transformation, photosynthesis, plant growth and development, and population dynamics. Three hours lecture, three hours laboratory per week. Prerequisite: College Biology I (BIOL 150) or permission of instructor.

#### BIOL 207 HUMAN ANATOMY

Spring, 4 credit hours

This course is a detailed study of the human body with emphasis on structure with limited general function. Included topics are cells, tissues, skeletal, muscular, digestive, circulatory, respiratory, reproductive, urinary, nervous, endocrine systems and sense organs. The laboratory includes study of cells, tissues, organ systems, and dissection of a representative mammal. The course is most suitable for students in health-related or biology curriculums requiring in-depth knowledge of the human body. Three hours lecture, three hours laboratory per week. Prerequisites: New York State Regents Biology examination score of 75 or above or Introduction to Biology (BIOL 101) or College Biology I (BIOL 150) or permission of instructor.

#### BIOL 209 MICROBIOLOGY

Fall/Spring, 4 credit hours

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 College Biology I (BIOL 150) or Human Anatomy & Physiology I (BIOL 217); AND HS chemistry or Introduction to Chemistry (CHEM 101/100) or Investigative Chemistry (CHEM 107/108); or permission of instructor.

#### BIOL 217 HUMAN ANATOMY & PHYSIOLOGY I

Fall/Spring, 4 credit hours GER

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, and nervous 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 Therapist Assistant, Dental Hygiene and other health-related fields that require a two-semester Anatomy and Physiology sequence. Three hours lecture, three hours laboratory per week. Prerequisites: High School Biology Regents score of 75 or above, Introduction to Biology (BIOL 101); and High School Chemistry Regents score of 65 or above or Introduction to Chemistry (CHEM 101/100) or Investigative Chemistry (CHEM 107/108); or permission of instructor.

#### BIOL 218 HUMAN ANATOMY & PHYSIOLOGY II Fall/Spring, 4 credit hours

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. May also cover the immune system, metabolism, fluid-electrolyte-acid-base balance, and pregnancy and development. The laboratory will include a dissection of the cat. Three hours lecture, three hours lab per week. Prerequisite: Anatomy & Physiology I (BIOL 217) or permission of instructor.

#### BIOL 310 THE GENOME

Fall, 3 credit hours GE

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 human genetics. Besides providing a basis for understanding the current state of human 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 human heredity. Three hours lecture per week. Prerequisites: College Biology I (BIOL 150) or Human Anatomy & Physiology I (BIOL 217) and junior level status, or permission of instructor.

#### BIOL 325 BIOLOGY IN SOCIETY

Spring, 3 credit hours GER 2

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 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 hours lecture per week. Prerequisites: College Biology I (BIOL 150) OR Microbiology (BIOL 209) OR Human Anatomy and Physiology I (BIOL 217).

#### BIOL 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN BIOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Biology will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available.

#### BSAD 100 INTRODUCTION TO BUSINESS

Fall/Spring, 3 credit hours

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. Three hours lecture per week.

#### BSAD 120 PRINCIPLES OF BANKING Fall, 3 credit hours

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. Three hours lecture per week.

#### BSAD 200 BUSINESS COMMUNICATIONS

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Writing intensive course. Prerequisites: Oral and Written Expression (English 102) or Expository Writing (English 101), or permission of instructor.

### Course Descriptions: BUSINESS

#### BSAD 201 BUSINESS LAW I

Fall/Spring, 3 credit hours

Text and case study of court system, origin, nature and classification of law with emphasis on specific laws relating to torts and general contract law. Three hours lecture per week.

#### BSAD 202 BUSINESS LAW II

Spring, 3 credit hours

Continuation of Business Law I. Areas of study include law of sales, commercial paper, agency, partnerships and corporations. Three hours lecture per week. Prerequisite: Business Law I (BSAD 201) or permission of instructor.

#### BSAD 215 SMALL BUSINESS MANAGEMENT

Fall/Spring, 3 credit hours

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 a business plan. Three hours lecture per week. Prerequisite: Expository Writing (ENGL 101), or Oral and Written Expression (ENGL 102), or permission of instructor.

#### BSAD 220 PRINCIPLES OF RETAILING

Fall, 3 credit hours

A realistic, pragmatic approach to retailing beginning with a study of the retail customer's motives and objectives. The operation of a retail store is studied in depth with emphasis on evaluation of the management alternatives in regard to buying, pricing, sales promotion and advertising. The problems of starting a retail business are also explored. Three hours lecture per week.

#### BSAD 222 PRINCIPLES OF SELLING

Fall/Spring, 3 credit hours

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 apply selling principles such as persuasive communication, negotiating, prospecting, preparing and delivering sales presentations, overcoming objections, and closing the sale. Three hours lecture per week.

#### BSAD 225

#### ADVERTISING AND PROMOTION

Spring, 3 credit hours

This course explores the fundamentals of advertising and promotion. Emphasis is placed on progressive advertising media, such as: the Internet, social media, and influencer marketing. Market

research, consumer behavior, and target market selection are identified as critical components of effective advertising and promotion. The social and economic role of advertising and promotion is explored in relationship to such established disciplines as psychology and sociology.

#### BSAD 235 BUSINESS AND ACCOUNTING FIELD EXPERIENCE

Fall/Spring, 3 credit hours

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 en-trepreneurs 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 supervisors and supervising organization. Prerequisite: Foundations of Managerial Accounting (ACCT 102) or permission of the instructor.

#### BSAD 301 PRINCIPLES OF MANAGEMENT

Fall, 3 credit hours

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: Introduction to Business (BSAD 100) or Business Law I (BSAD 201) or Business Communications (BSAD 200) and minimum 30 credit hours with 2.0 GPA or permission of instructor.

#### BSAD 305 PUBLIC BUDGETING & FISCAL MANAGEMENT

Fall, 3 credit hours

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. Three hours lecture per week. Prerequisites: Introduction to Information Technology (CITA 110); Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103) or Introduction to Government and Politics (POLS 101); Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); College Algebra (MATH 121), or Statistics (MATH 141); or permission of instructor.

#### BSAD 310 HUMAN RESOURCE MANAGEMENT Fall/Spring, 3 credit hours

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: Introduction to Business (BSAD 100) or Business Law I (BSAD 201) or Fundamentals of Emergency and Disaster Management (EADM 201) or permission of instructor.

#### BSAD 319 PROFESSIONAL ETHICS

Fall/Spring/Summer, 3 credit hours

This course acquaints students with the major frameworks for ethical decision making in the professions based on Kantian, Utilitarian and Contract ethics and principles: consequence, liberty, opportunity, need, justice and distributive justice. It examines ethical questions that can arise in professional practice, the relationship between professionals and clients as well as the connection between ordinary and professional morality. Students will use analytical tools to recognize and address contemporary ethical dilemmas in the professions: business, criminal justice and computer information systems. Emphasis is placed on utilizing ethical theories that affect thinking, policy formulation, and professional conduct. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) and junior level status, or permission of instructor.

#### BSAD 325 CONSUMER BEHAVIOR

Fall, 3 credit hours

This course explores consumer behavior and its internal and external influencers. Emphasis is placed on the consumer decision making process. Consumer behavior is analyzed for its significance in developing effective marketing communication, product positioning, and product promotion. Students apply consumer behavior theory to analyze consumer lifestyle data and identify customer profiles for products and their respective target markets. Three hours lecture per week. Prerequisites: 45 credit hours or permission of instructor.

#### BSAD 330 SALES FORCE MANAGEMENT

Fall, 3 credit hours

This course explores the principles of sales force management. The 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. Three hours lecture per week. Prerequisite: 30 hours of credit or permission of the instructor.

## Course Descriptions: BUSINESS

#### BSAD 335 ADVANCED BUSINESS INTERNSHIP

Fall/Spring/Summer, 3 credit hours

This advanced business internship program is designed as an elective for students, on a space available basis and Instructor's permission. Offers hands-on experience working with small business entrepreneurs in a confidential and professional environment. Allows the intern the opportunity to apply their educational, organizational and time management skills in solving real life business issues and assist less experienced interns. Prerequisite: NYS/SBDC Business Internship (BSAD 235) and permission of instructor.

#### BSAD 340/DHYG 340 MANAGEMENT COMMUNICATIONS Fall/Spring, 3 credit hours

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 will be developed. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) and junior level status or the permission of the instructor.

#### BSAD 345 TECHNOLOGICAL INNOVATIONS AND ENTREPRENEURSHIP

Fall/Spring, 3 credits

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. Three hours lecture per week. Prerequisites: Principles of Macroeconomics (ECON 101), Introduction to Finance (FSMA 210) and Introduction to Information Technology (CITA 110) or permission of instructor.

#### BSAD 350 MARKETING

Fall/Spring, 3 credit hours

Problems in marketing management and the marketing mix elements of product, price, promotion, and distribution are presented in the context of a dynamic global environment. The impact of legal, political, social, ethical, technological, economic, and competitive factors upon marketing activities are discussed. Three hours lecture per week. Prerequisites: Foundations of Financial Accounting

(ACCT 101) and Expository Writing (ENGL 101) or junior level status or permission of instructor.

#### BSAD 353 CASINO MANAGEMENT Fall/Spring, 3 credit hours

This course examines the casino industry using real world business examples. Topics covered in this course are casino management strategy, casino marketing, and casino management policies and issues. Within the three major topics, students explore the accounting and auditing procedures within a casino organization, understand business aspects of slots and table games, examine the implementation of marketing strategies at various casinos and assess the impact of government regulations on the entire U.S. casino industry. Students evaluate the overall impact of both the external and internal casino environment while formulating strategic plans for casino operations. Three hours lecture per week. Prerequisite: Introduction to Business (BSAD 100), GER Math, and junior level standing, or permission of instructor.

#### BSAD 354 CASINO FINANCIAL CONTROLS Fall/Spring, 3 credit hours

This course examines the financial controls that are utilized in the casino industry. Topics covered in this course are casino financial controls, casino theoretical versus actual hold percentage, and conversion of casino financial data into financial statements. Within the three major topics, students will explore historical and present day casino financial controls, analyze and learn how to calculate the difference between theoretical and actual hold percentages, examine the procedures necessary to ensure casino financial stability, and develop an understanding of casino credit and its applications. Students learn how gaming activities are transformed into financial statements and will also examine the genesis of promotional allowances and the criteria for issuing both these allowances and credit within a casino organization. Three hours lecture per week. Prerequisite: Introduction to Business (BSAD100), GER Math, and junior level standing, or permission of instructor.

#### BSAD 355 MANAGEMENT OF TECHNOLOGY Fall, 3 credit hours

In this course students explore strategic management of technology, patterns of technological change, technological transitions and technological innova-tions within organizations. The conceptual framework of the course is an evolutionary process perspective on technology management. Students examine the scope of technology management in relation to: design, production, finance, marketing, accounting, sales, distribution and human relations. Three hours lecture per week. Prerequisites: 45 credit hours or permission of the instructor.

#### BSAD 356 CASINO MARKETING

Fall/Spring, 3 credit hours

This course explores marketing theories and applications within a casino organization. Topics covered in this course are strategic planning, macromarketing: external factors that impact the casino industry, and micromarketing: factors that a casino can control. Within the three major topics students will examine the role of consumer behavior on gambling motivation, analyze how to effectively segment casino customers and administer the service-profit chain which examines how companies link profit and growth to customer loyalty, satisfaction, and value. Students will also analyze channels of distribution applicable to the casino industry and they will also assess the differing computer technologies and their impact on gaming operations. Three hours lecture per week. Prerequisite: Introduction to Business (BSAD100), Expository Writing (ENGL 101) or Oral & Written Expression (ENGL 102), GER Math, and junior level standing, or permission of instructor.

#### BSAD 357 CASINO GAMING METHODS Fall/Spring, 3 credit hours

This course explores the gaming methods and procedures utilized by various departments within a casino gaming organization. Topics covered include an introduction to casino methods, slot and table game operations, and security and surveillance functions. Within the three major topics, students survey and interpret the many functions performed by the slots and table games operations, and comprehend how to apply the general mathematics associated with casino gaming. Students also learn how to distinguish between the rules and objectives of the various casino games such as bingo, baccarat and craps, and analyze the organizational structures and objectives associated with the casino security and surveillance departments. Three hours lecture per week. Prerequisite: Introduction to Business (BSAD100), GER Math, Statistics (MATH 141) and junior level standing, or permission of instruc-

## BSAD 365 FINANCIAL STATEMENT ANALYSIS Fall/Spring, 3 credit hours

This course explores both the underlying theory and practical applications of financial reporting and analysis. It emphasizes the importance of using financial statements as a source of information to evaluate historical and future economic performance. Three hours lecture per week. Prerequisites: Foundations of Managerial Accounting (ACCT 102) or Survey of Accounting (ACCT 104); Introduction to Information Technology (CITA 110), Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); and Statistics (MATH 141); or permission of instructor.

### Course Descriptions: BUSINESS

#### **BSAD 372** ELECTRONIC COMMERCE

Fall/Spring, 3 credit hours

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, ecommerce business and revenue models, startup strategies, the evolution of social commerce, and additional emerging technologies are explored. Three hours lecture per week. Prerequisites: Introduction to Information Technology (CITA 110), Expository Writing (ENGL 101), and junior level standing, or permission of instructor.

#### **BSAD 373** INTERNATIONAL BUSINESS MANAGEMENT

Fall/Spring, 3 credit hours

This course enhances the student's ability to operate in a global market. Students will become grounded in global marketing, strategy, human resource management, and finance. Students will develop a strong understanding of international culture and ethical issues when taking a local business global. Students will learn to use an organization's global resources and logistics to enact the organization's global strategy. Prerequisites: Expository Writing (ENG 101) or Oral and Written Expression (ENG 102), or permission of instructor.

#### **BSAD 375** LEADERSHIP AND CHANGE

Fall/Spring, 3 credit hours

This course will prepare the students with the theory, tools, and competency to harness modern leadership principles in a changing 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. Three hours lecture per week. Prerequisites: Principles of Management (BSAD 301) or permission of instructor.

#### **BSAD 400** OPERATIONS/PRODUCTION MANAGEMENT

Fall/Spring, 3 credits

This course focuses on the study of modern theory and practice relating to the operations function in both manufacturing and service organizations. Topics include forecasting, materials and capacity planning and quality control. Case studies are used to examine and analyze the manufacturing and service environments in terms of operational planning, the use of teams and teamwork and decision making problems that confront management. Fundamentals of the analytical method are introduced to help solve problems in the design, operation and control of systems. Three hours of lecture per week. Prerequisites/corequisites: Microeconomics (ECON 103),

Principles of Management (BSAD 301), Foundations of Financial Accounting (ACCT 101) and Statistics (MATH 141) or permission of instructor.

#### **BSAD 405** ORIENTATION TO CULMINATING **EXPERIENCE**

Fall/Spring, 1 credit hour

This course is intended as the precursor to the senior culminating experience in the Bachelor of Business Administration (BBA) 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 and performance assessment/evaluation. This course is a prerequisite to Internship in Business Administration (BSAD 450) and the Senior Project (BSAD 410). One hour lecture per week. Prerequisite: senior level status in Bachelor of Business Administration programs or permission of instructor.

#### **BSAD 406 CUMULATIVE EVALUATION - BBA IN** MANAGEMENT

Fall/Spring, 3 credit hours

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. Three lecture hours per week. Prerequisite/corequisite: Completion of a minimum of 90 credit hours in the Bachelor Business Administration in Management Degree.

#### **BSAD 410** SENIOR PROJECT

Fall/Spring, 3-15 credits

This course is an alternative to BSAD 450. 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 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. 112.5 to 562.5 project hours. Prerequisites: Introduction to Culminating Experience (BSAD 405) and senior level status in the Management program or permission of the instructor.

#### **BSAD 420** APPLIED ORGANIZATIONAL MANAGEMENT

Fall/Spring, 3 credit hours

Applied Organizational Management 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 missions. Theories of management and 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 formulation and organizational culture. Three hours lecture per week. Prerequisites: Introduction to Business (BSAD 100) and junior level status or permission of instructor.

#### **BSAD 449** STRATEGIC POLICIES & ISSUES Fall, 3 credit hours

This course will define the criteria for critica 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. Three lecture hours per week. Prerequisite: Microeconomics (ECON 103), Introduction to Finance (FSMA 201), Principles of Management (BSAD 301), and Marketing (BSAD 350), or permission of instructor.

#### **BSAD 450 BUSINESS INTERNSHIP** Fall/Spring, 6-15 credits

The Business Internship is an academic program, which integrates classroom work and practical experience with cooperating businesses. The internship allows seniors the opportunity to apply classroom learning in corporations. 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.

Working with a supervisor, the student will perform prescribed work within an administrative setting. 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 limited to, information gathering, research, data analysis, planning, organization, implementation, evaluation, and other tasks and responsibilities deemed necessary. Forty hours per week as required. Prerequisites: Senior level status in the Management program or permission of instructor. Grade point average of 3.0 or higher before the internship begins or permission of the instructor in consultation with the student's advisor. All business courses must be completed before participating in the internship.

#### BSAD 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN BUSINESS

Fall/Spring, 1-4 credit hours

Special Topics in Business will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available. Prerequisite: permission of the instructor.

### Course Descriptions: BUSINESS, CHEMISTRY

#### CHEM 100 INTRODUCTION TO CHEMISTRY LABORATORY

Fall/Spring, 1 credit hour 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. Two hours laboratory per week. Corequisite: Introduction to Chemistry (CHEM 101), or permission of instructor. If a student withdraws from CHEM 101 prior to the last day to withdraw, withdrawing from this course is required.

#### CHEM 101 INTRODUCTION TO CHEMISTRY

Fall/Spring, 3 credit hours GER 2

This is an overview of chemistry which will include atomic structure, English-metric unit conversions, chemical nomenclature, the mole concept, stiochiometry, 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 per week. Conditions: For students who did not pass the NYS Chemistry Regents exam (<65), or who did not take HS chemistry. Prerequisite: Beginning Algebra (MATH 100) or high school equivalent, or permission of instructor.

#### CHEM 107 INVESTIGATIVE CHEMISTRY

Spring, 3 credit hours GER 2

This is a basic introduction to chemistry designed to cover topics and methods used in forensic science. Topics covered include atomic structure, measurements and conversions, nomenclature, the mole concept, chemical reactions and stoichiometry, solution chemistry, acid-base theory, physical behavior of gases, calorimetry, chemical kinetics and dynamic equilibrium. Also included is the chemistry of explosions, the nature of drug molecules and how they relate to addiction, and 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 (<65) or who did not take HS chemistry. Three hours lecture per week. Prerequisite: Beginning Algebra (MATH  $\hat{100}$ ) or high school equivalent, or permission of instructor. Corequisite: Investigative Chemistry Lab (CHEM 108) or permission of instructor. A student cannot receive credit for both CHEM 101 and CHEM 107.

#### CHEM 108 INVESTIGATIVE CHEMISTRY LABORATORY

Spring, 1 credit hour

This course is a laboratory course to accompany Investigative Chemistry (CHEM 107). The

GER 2

course provides 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. 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 laboratory per week. Corequisite: Investigative Chemistry (CHEM 107), or permission of instructor. A student cannot receive credit for both CHEM 108 and CHEM 100. If a student withdraws from CHEM 107 prior to the last day to withdraw, withdrawing from this course is required.

#### CHEM 120 GENERAL, ORGANIC, AND BIOCHEMISTRY

Fall/Spring, 3 credit hours GER.

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. Three hours lecture per week. Prerequisites: High School Regents Chemistry (65 grade minimum), or Introduction to Chemistry (CHEM 101) and High School Algebra or Intermediate Algebra (MATH 106) or permission of instructor. Corequisite: General, Organic, and Biochemistry Laboratory (CHEM 121) the first time CHEM 120 is attempted or permission of instruction.

#### CHEM 121 GENERAL, ORGANIC, AND BIOCHEMISTRY LABORATORY

Fall/Spring, 1 credit hour GER 2

The laboratory component of General, Organic, and Biochemistry (CHEM 120). 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. Two hours laboratory per week. Prerequisites: NYS Chemistry Regents (65 grade minimum) or Introduction to Chemistry (CHEM 101) and HS algebra or Intermediate Algebra (MATH 106), or permission of instructor. Corequisite: General, Organic, and Biochemistry (CHEM 120) or after CHEM 120 has been successfully completed, or permission of instructor. If a student withdraws from CHEM 120 prior to the last day to withdraw, withdrawing from this course is required.

#### CHEM 150 COLLEGE CHEMISTRY I

Fall, 4 credit hours

GER 2

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. Three hours lecture, three hours laboratory per week. 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 hours

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, chemical thermodynamics, free energy concepts, and nuclear chemistry. Three hours lecture, three hours laboratory per week. Prerequisites: College Chemistry I (CHEM 150) or permission of instructor.

#### CHEM 301 ORGANIC CHEMISTRY I

Fall, 4 credit hours

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 analytical techniques, and several organic syntheses. Three hours lecture, three hours laboratory per week. Prerequisite: College Chemistry II (CHEM 155) or permission of instructor.

#### CHEM 302 ORGANIC CHEMISTRY II

Spring, 4 credit hours

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, heterocyclics, and nuclear magnetic resonance. The laboratory portion of the course will consist of organic syntheses and qualitative organic analysis. Three hours lecture, three hours laboratory per week. Prerequisite: Organic Chemistry I (CHEM 301) or permission of instructor.

### Course Descriptions: CHEMISTRY, COMPUTER

#### CHEM 430 BIOCHEMISTRY

Fall, 3 credit hours

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. Three hours lecture per week. Prerequisite: Organic Chemistry II (CHEM 302) or permission of instructor.

#### CHEM 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN CHEMISTRY

Fall/Spring, 1-4 credit hours

Special Topics in Chemistry will generally include topics of current interest or topics not covered in courses currently offered by the Department or in combinations not currently available.

#### CITA 100 COMPUTER FLUENCY

Fall/Spring, 3 credit hours

This course provides computing knowledge through the introduction of basic computing concepts by simulating a computer gaming environment and project based activities. 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. Three hours lecture per week.

#### CITA 101 LIBRARY/INFORMATION LITERACY Fall/Spring, 1 credit hour

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. Two hours lecture per week for seven weeks.

#### CITA 103 INTRODUCTION TO WORLD WIDE WEB Fall/Spring, 1 credit hour

This course will introduce students to the World Wide Web (WWW) and Microsoft Outlook. This course will offer instruction on how to use Internet Explorer and Microsoft Outlook for searching information on the Internet, send and receive e-mail, maintain a contact list, keep a calendar, and schedule meetings and events. Two hours lecture per week for seven weeks.

#### CITA 104 INTRODUCTION TO DATABASE

Fall/Spring, 1 credit hour

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. Two hours lecture per week for seven weeks.

#### CITA 105 INTERMEDIATE DATABASE Fall/Spring, 1 credit hour

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, use the briefcase wizard, create action queries and macro writing. Two hours lecture per week for seven weeks. Prerequisite: Introduction to Database (CITA 104) or permission of instructor.

#### CITA 106 INTRODUCTION TO WORD PROCESSING

Fall/Spring, 1 credit hour

This course is designed to help the student 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

This course is designed to help the student 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. Prerequisite: Introduction to Word Processing (CITA 106) or permission of instructor.

#### CITA 108 INTRODUCTION TO SPREADSHEETS Fall/Spring, 1 credit hour

This course introduces the student to the fundamentals of spreadsheet programs. Students will create spreadsheets with literal and numeric data. The numeric data will be constants and/or formulas. Printing of spreadsheets will also be covered. Creating line, bar, stacked bar and pie graphs from a spreadsheet will also be included in the course. Two hours lecture per week for seven weeks.

#### CITA 109 INTERMEDIATE SPREADSHEETS Fall/Spring, 1 credit hour

This course is designed to increase the students' 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. Two hours lecture per week for seven weeks. Prerequisite: Introduction to Spreadsheets (CITA 108) or permission of instructor.

#### CITA 110 INTRODUCTION TO INFORMATION TECHNOLOGY

Fall/Spring/Summer, 3 credit hours

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. Successful completion of this course will fulfill the SUNY Canton Computer Competency graduation requirement. Two hours lecture, two hours laboratory per week.

## CITA 111 WEB PAGE DEVELOPMENT Fall/Spring, 2 credit hours

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. Two hours lecture per week. Prerequisite: Introduction to World Wide Web (CITA 103) or permission of instructor.

#### CITA 112 INTRODUCTION TO ELECTRONIC PRESENTATIONS

Fall/Spring, 1 credit hour

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 152

#### COMPUTER LOGIC

Fall/Spring, 3 credit hours

This course provides a background in logical problem solving skills used in computing. Topics include problem solving techniques, number systems, programming concepts, relational and logical operators. Three hours lecture per week. Prerequisite: Leveled into at least into and Oral and Written Expression (ENGL 102) Corequisite: Intermediate Algebra (MATH 106) or completion of a higher level math course; or permission of instructor.

### Course Descriptions: COMPUTER

#### CITA 163 SURVEY OF INFORMATION TECHNOLOGY

Fall/Spring, 3 credit hours

An introductory survey of Information Technology (IT) and IT terminology. Emphasis is given to 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. Three hours lecture per week.

#### CITA 170 COMPUTER CONCEPTS AND OPERATING SYSTEMS

Fall/Spring, 3 credit hours

This is a study of the terminology and concepts associated with computer systems hardware and software. Topics will include: system hardware components, memory organization and management, operating systems, troubleshooting fundamentals, etc. Students will construct PCs and install, configure, test and troubleshoot system software to apply the various concepts covered in the course. Two hours lecture, two hours laboratory per week.

#### CITA 171 OPERATING SYSTEM USE AND ADMINISTRATION

Fall/Spring, 3 credit hours

This is a project intensive course covering current operating systems. The projects in this course are designed to give students an overview of operating systems, and will 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. Three hours lecture per week in a computer classroom. Prerequisite: Computer Logic (CITA 152); corequisite: Computer Concepts and Operating Systems (CITA 170); or permission of instructor.

## CITA 180 INTRODUCTION TO PROGRAMMING Fall/Spring, 4 credit hours

This course develops methodologies and techniques for program creation and implementation. Writing high-quality, internally- documented, well-structured programs utilizing appropriate data structures is emphasized. Prerequisite: Computer Logic (CITA 152) with a grade of C or better and at least Intermediate Algebra (MATH106) with a grade of C or better, or permission of instructor.

#### CITA 202 COMPUTER USER SUPPORT CONCEPTS AND SKILLS

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite: One computer related course or permission of instructor.

#### CITA 204 SYSTEMS ANALYSIS AND DESIGN Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Survey of Information Technology (CITA 163), Introduction to Programming (CITA 180), and Database Systems with Web Applications (CITA 215), or permission of instructor.

#### CITA 215 DATABASE SYSTEMS WITH WEB APPLICATIONS

Spring, 3 credit hours

Database management systems are studied in the context of an SQL-based product. Topics include: logical organization versus physical organization; relational, network and hierarchical models; normalization; and the creation of a web-based user-interface to manipulate tables. A term project is assigned. Two hours lecture, two hours laboratory per week. Prerequisite: Computer Logic (CITA 152) or permission of instructor.

#### CITA 220 DATA COMMUNICATIONS AND NETWORK TECHNOLOGY

Offered as needed, 3 credit hours

A study of terminology, hardware and software associated with data communications and network technology. Areas of study will 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 net works, 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 will include end-user perspective, network operating systems, cabling, hardware protocols, software and applications, design, and administration. This course should be taken concurrently with Data Communications and Network Technology Lab (CITA 221). Three hours of lecture per week. Prerequisites: Operating System Fundamentals (CITA 171), Intermediate Algebra (MATH 106), or permission of instructor.

# CITA 221 DATA COMMUNICATIONS AND NETWORK TECHNOLOGY LAB Offered as needed, 1 credit hour

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. Two hours laboratory per week. Prerequisites: Operating system Fundamentals (CITA 171), Intermediate Algebra (MATH 106) or permission of instructor.

#### CITA 250 INFORMATION SECURITY Fall/Spring, 3 credit hours

An introduction to various technical and administrative aspects of Information Security and Assurance. Students will be exposed to the spectrum of Information Security activities, methods, methodologies, and procedures. Coverage will 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. Three hours lecture per week. Prerequisite: Data Communications and Network Technology (CITA 220) or permission of instructor.

#### CITA 260 INTRODUCTION TO WIRELESS TECHNOLOGY

Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite/corequisite: Data Communications and Network Technology (CITA 220) or permission of instructor.

#### CITA/MINS 300 MANAGEMENT INFORMATION SYSTEMS Fall/Spring, 3 credit hours

Students learn the concepts underlying the design, implementation, control, evaluation, and strategic use of modern, 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. Three hours lecture per week. Prerequisites: Junior standing or the sum of credits earned and credits currently enrolled in is at least 60 or permission of instructor.

#### CITA/MINS 307 CUSTOMER RELATIONSHIP MANAGEMENT

Fall/Spring, 3 credit hours

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

## Course Descriptions: COMPUTER

with customers, gathering data for future marketing endeavors and providing strategic guidance to the organization. The course provides insights into customer life-cycle management, customer lifetime value and measuring customer profitability. Three hours lecture per week. Prerequisites/corequisites: Management Information Systems (CITA/MINS 300) or permission of instructor.

#### CITA 310 WEB SERVER ADMINISTRATION

Fall, 3 credit hours

A comprehensive survey of all aspects of web server administration. Students will 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. Two hours lecture, two hours laboratory per week. Prerequisite: Data Communications and Network Technology (CITA 220) or permission of instructor.

#### CITA/MINS 315 DECISION SUPPORT SYSTEMS Fall/Spring, 3 credit hours

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/corequisites: Management Information Systems (CITA/MINS 300) or permission of instructor.

#### CITA/MINS 320 INTRODUCTION TO DATA MINING Spring, 3 credit hours

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 neural networks, nearest neighbor approaches, market basket analysis, and association rules. Three hours lecture per week. Prerequisites/corequisites: Introduction to Database (CITA 104) or Database Systems (CITA 215) and Statistics (MATH 141) or permission of instructor.

#### CITA 330 EMERGING INFORMATION TECHNOLOGY APPLICATIONS

Spring, 3 credit hours

An advanced study of emerging information technology applications. This course covers web application development with XML, multimedia technologies including graphics, audio, anima-

tion, video, presentations, desktop publishing, web publishing, and input technologies including speech, and writing recognitions. The course will also include additional topics on most current state-of-the-art IT applications. Two hours lecture, two hours laboratory per week. Prerequisite: junior level status or permission of instructor.

#### CITA 342 VISUAL PROGRAMMING AND DEVELOPMENT TOOLS

Fall, 3 credit hours

An introduction to the development of computer applications using rapid development tools such as Visual Basic or Visual C++. Emphasis will be on designing and managing graphical user interfaces, procedures, file management, debugging and testing. Two hours lecture and two hours lab per week. Prerequisite: Introduction to Programming (CITA 180) or permission of instructor.

#### CITA 352 ETHICAL HACKING AND PENETRATION TESTING

Fall/Spring, 3 credit hours

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. Three hours lecture per week in a computer classroom. Prerequisites: Information Security (CITA 250) or permission of instructor.

#### CITA 360 CRYPTOLOGY IN THEORY AND PRACTICE

Fall/Spring, 3 credit hours

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. Three lecture hours per week. Prerequisites: Data Communications and Network Technology (CITA 220) or Permission of the instructor.

#### CITA/JUST 365 DIGITAL FORENSIC ANALYSIS Fall/Spring/Summer, 3 credit hours

This course is designed to prepare the student to complete forensic analysis of digital media and to understand the process and technical challenges of internet investigations. The course looks specifically at how to obtain evidence from digital media, how to process network messages and logs while preserving the evidentiary chain, and the legal aspects of the search and seizure of digital media and related equipment and information. Two hours lecture and two hours laboratory per week. Prerequisites: Introduction to IT (CITA 110) or higher level CITA course and junior level status or permission of instructor.

#### CITA 385 COBOL FOR BUSINESS AND ACCOUNTING

Fall/Spring/Summer, 3 credit hours

This course provides students with the knowledge and experience to write and modify programs written in the COBOL programming language. Classroom exercises use real world scenarios so students will gain an understanding of where COBOL fits in the business world. One 2-hour lecture / one 2-hour lab each week. Prerequisite: CITA152 or permission of the instructor.

#### CITA 400 QUANTITATIVE APPROACHES TO MANAGEMENT

Spring, 3 credit hours

This is the study of the decision-making process and how quantitative methods are used to find solutions to business problems. Computer software tools will be 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. Two hours lecture, two hours laboratory per week. Prerequisite: Statistics (Math 141) or permission of department.

#### CITA 420 PROGRAMMING FOR THE WEB Fall, 3 credit hours

This is a survey of programming languages and techniques for web development. Topics include CGI's, client-side programming with JavaScript, dynamic content using Java and ActiveX, server-side programming using Active Server Pages and VB Script, creating dynamic, database driven content, and developing web based client/server database applications. Two hours lecture, two hours laboratory per week. Prerequisites: Web Server Administration (CITA 310) and Emerging Information Technology Applications (CITA 330), or permission of instructor

#### CITA/MINS 425 ENTERPRISE RESOURCE PLANNING Fall/Spring, 3 credit hours

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 returns on information systems investment. Three hours lecture per week. Prerequisites/corequisites: Management Information Systems (CITA/MINS 300) and junior level status or permission of instructor.

### Course Descriptions: COMPUTER, CIVIL/CONSTRUCTION

#### CITA/MINS 430

## DATA AND KNOWLEDGE MANAGEMENT Fall/Spring, 3 credit hours

This course focuses on the development of a knowledge-management system using an organization's tacit and explicit knowledge to execute its strategy. The course explores practices entailed in developing a knowledge infrastructure, managing the interaction of people and technology, valuing knowledge assets, leveraging teams, and transferring knowledge across organizations. Three lecture hours per week. Prerequisites/corequisites: Management Information Systems (CITA/MINS 300) and junior level status or permission of instructor.

#### CITA 440

#### NETWORK MANAGEMENT

Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite/corequisite: Network Technology (CITA 230) or permission of instructor.

#### CITA 441 NETWORK MANAGEMENT LAB

Fall/Spring, 1 credit hour

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. Two lab hours per week. Prerequisites: CITA 221 Data Communications and Network Technology Lab.

#### CITA 460 INFORMATION TECHNOLOGY AND NETWORKED ECONOMY

Fall, 3 credit hours

This course will examine the fundamental concepts and components of Information Technology from both managerial and professional end-user perspective. The course will also explore the foundations of information systems to the demands of electronic commerce, connectivity, and networked economy. Three hours lecture per week. Prerequisite: senior level status in a four-year program or permission of instructor.

#### CITA 479 INFORMATION TECHNOLOGY INTERNSHIP ORIENTATION

Fall/Spring, 1 credit hour

This course is designed as the precursor to the Senior Culminating Experience for seniors in the Information Technology program. Seniors will meet on a weekly basis with faculty to discuss resume preparation, job interviewing, locating and establishing internships, and internship requirements. This course is a prerequisite to Internship in Information Technology (CITA 480). One hour lecture

per week. Prerequisites/corequisites: all upper-level Information Technology core courses.

#### CITA 480 INTERNSHIP IN INFORMATION TECHNOLOGY

Fall/Spring, 6 or 12 credit hours

This is 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. Approximately 600 hours of supervised activity. Prerequisites: Information Technology Internship Orientation (CITA 479) and senior level status in the Information Technology program or permission of instructor.

#### CITA 481 SENIOR PROJECT IN INFORMATION TECHNOLOGY

Fall/Spring, 6 credit hours

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 will prepare a project proposal, conduct literature review and project implementation, submit a project report, and make an oral presentation. At least 225 project activity hours needs to be fulfilled. Corequisite: Information Technology and Networked Economy (CITA 460). Prerequisites: Information Technology Internship Orientation (CITA 479), and senior level status in Information Technology program, or permission of the program director.

#### CITA 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN COMPUTING

Fall/Spring, 1-4 credit hours

Special Topics in computers will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

#### CONS 101 ELEMENTARY SURVEYING

Fall, 4 credit hours

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 are of limited size and offer "one-on-one" instruction opportunity. Three hours lecture, three hours laboratory per week. Prerequisites: Intermediate Algebra (MATH 106) or concurrent enrollment in College Algebra (MATH 121) plus a beginning physics course or permission of instructor.

#### CONS 111 COMMERCIAL STRUCTURES

Spring, 3 credit hours

The study of construction materials, practices, equipment, and terminology used in the commercial construction field. Lectures and laboratory periods develop theory and practice in excavation, foundation form work, use of reinforcing steel in concrete, erection of steel frame buildings, commercial wall and roof systems, interior and exterior wall finishes, and commercial building materials. Field trips to be arranged when practical. Two hours lecture, three hours laboratory per week.

#### CONS 112 WOOD STRUCTURES Fall, 3 credit hours

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 hours

An introduction to the fundamental principles of engineering and architectural drafting and to the basic idea that all people involved in engineering and/or construction will communicate with drawings of some nature. It is intended that the student will have exposure to orthographic projection, perspective and isometric views, descriptive geometry, good drafting practices and engineering lettering. It is also intended to expose the student to a variety of construction prints so as to create the ability to deal with all varieties of drawings commonly emanating from architectural/engineering firms and found on construction job sites. In conjunction with manual drawing, the student applies CAD (computer aided drafting) throughout the course. One hour lecture, four hours laboratory per week.

#### CONS 151 BUILDING TRADES—BLUEPRINT READING AND DRAFTING

Fall, 2 credit hours

Instruction includes understanding the fundamental concepts in freehand sketching and instrument drawing needed for communication in the construction industry. Orthographic projection,

## Course Descriptions: CIVIL/CONSTRUCTION

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. CER-TIFICATE/AAS ELECTIVE CREDIT ONLY. One hour lecture, two hours laboratory per week.

#### **CONS 172** TECHNICAL STATICS

Spring, 3 credit hours

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 structural mechanics/strength of materials. Two hours lecture, two hours recitation per week. Prerequisites: College Algebra (MATH 121), College Physics I (PHYS 121), or permission of instructor.

#### **CONS 203** ADVANCED SURVEYING

Fall, 4 credit hours

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. Two hours lecture, six hours laboratory per week (one field section and one CAD drafting section). Prerequisite: Elementary Surveying (CONS 101) or permission of instructor.

#### **CONS 216** SOILS IN CONSTRUCTION Spring, 4 credit hours

TStudents 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 in-troduced, 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 related 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. This is a writing intensive course. Prerequisite:

College Algebra (MATH 121); or Pre-Calculus Algebra (MATH 123); or Technical Math I (MATH 135); and sophomore status, or permission of the instructor.

#### **CONS 220**

#### **ENGINEERING MATERIALS**

Spring, 3 credit hours

A study of the wide spectrum of materials used in manufacturing of discrete parts and machines. Material structure, characteristics, mechanical properties and applications will be stressed for ferrous and non-ferrous metals, plastics, and composites. Two hours lecture, three hours laboratory per week. Prerequisites: College Algebra (MATH 121) and College Physics I (PHYS 121) or permission of instructor.

#### **CONS 222** CONSTRUCTION ESTIMATING Fall, 2 credit hours

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. One hour lecture, two hours laboratory per week. Prerequisites: Intermediate Algebra (MATH 106) or Technical Math 1 (MATH 135); and Computer Usage for Technicians (SOET 101), or Introduction to Engineering (ENGS 101); or Introduction to Spreadsheets (CITA 108); or permission of instructor.

#### **CONS 226 BRIDGE BUILDING** Spring, 1 credit hour

Students are challenged to an intercollegiate 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. Students meet for 45 hours per semester with classes scheduled according to the demands of the competition. Prerequisites: enrollment in a Canino School of Engineering Technology curriculum and permission of the instructor.

#### **CONS 233** STRUCTURAL DRAFTING Fall, 3 credit hours

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. One hour lecture, four hours laboratory per week. Prerequisites: Introduction to Computer Aided Drafting and Design (SOET 116) or equivalent introductory course in the use of CADD, and Strength of Materials for Engineering Technicians (CONS 272), or permission of instructor.

#### **CONS 272** STRENGTH OF MATERIALS FOR **TECHNICIANS**

Fall, 3 credit hours

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. Two hours lecture, two hours recitation per week. Prerequisites: Technical Statics (CONS 172), Calculus I (MATH 161) or permission of instructor.

### **CONS 274** CONSTRUCTION MANAGEMENT

Spring, 3 credit hours

Construction management fundamentals and their applications to the conduct of a construction business. The basics of estimating, scheduling methods and expediting field operation, along with construction contracts are studied. Three hours lecture per week.

#### **CONS 280** CIVIL ENGINEERING MATERIALS Fall, 3 credit hours

This course examines the important 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. Two, one-hour lectures and one, 3-hour lab per week. Prerequisites: College Algebra (MATH 121) , Pre-Calculus Algebra (MATH 123), Technical Math I (MATH 135)or permission of instructor.

#### **CONS 285** ENGINEERING GEOLOGY Spring, 4 credit hours

This course introduces engineers to earth processes 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

## Course Descriptions: CIVIL/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. Three hours of lecture, two hours of laboratory per week. Prerequisites: College Algebra (MATH 121); or Pre-Calculus Algebra (MATH 123); or permission of instructor.

#### CONS 304 REINFORCED CONCRETE DESIGN Spring, 4 credit hours

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. Three hours lecture, three hours laboratory per week. Prerequisites: Structural Analysis (CONS 336) and Civil Engineering Materials (CONS 280) or permission of instructor.

#### CONS 316 FOUNDATION DESIGN

Spring, 3 credit hours

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: Soils in Construction (CONS 216), and Strength of Materials (CONS 272), and Calculus I (MATH 161), or permission of the instructor.

#### CONS 322 HYDRAULICS

Spring, 4 credit hours

The basics of fluid mechanics and their application to Civil Engineering Technology are considered. Fundamental concepts presented are fluid properties, specific weight, density, specific gravity, absolute and kinematic viscosity. Major topic areas covered are: resultant force and center of pressure on submerged surfaces, flow of liquids in closed conduits including pressure losses and pump requirements, flow in open channels and sewer design and flow and pressure measurement techniques. Three hours lectures, one three-hour laboratory per week. Prerequisites: Strength of Materials for Technicians (CONS 272) or permission of instructor.

#### CONS 324 STRUCTURAL STEEL DESIGN Fall, 3 credit hours

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). Two hours lecture, two hours recitation per week. Prerequisites: Materials Testing (MECH 221), Structural Analysis (CONS 336), or permission of instructor.

#### CONS 336 STRUCTURAL ANALYSIS

Spring, 3 credit hours

This course covers analysis of statically determinate and introduces the analysis of statically indeterminate structures. Methods taught include analytical and closed formed equations for construction of influence lines, member forces and stresses, deflections, flexibility and stiffness analyses. Most work is done by manual calculation with the use of spreadsheets; however students are introduced to modern computer applications used in structural analysis. Prerequisites: Strength of Materials for Technicians (CONS 272), Calculus II (MATH 162), or permission of instructor.

#### CONS 338 ADVANCED MECHANICS OF MATERIALS Spring, 3 credit hours

This course includes 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 hours lecture per week. Prerequisites: Structural Analysis (CONS 336) or permission of instructor.

#### CONS 350 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS

Spring, 3 credit hours

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); or Junior status; or permission of the instructor.

#### CONS 366 STRUCTURAL STEEL DETAILING Fall, 3 credit hours

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 is carried out. Drawing prints are made for checking purposes from the pencil drawings. The AISC handbook is used extensively as a reference. One hour lecture, four hours laboratory per week. Prerequisites: Structural Steel Design (CONS 324), Computer Drafting (SOET 116), or permission of instructor.

# CONS 368 BUILDING ELECTRICAL AND MECHANICAL SYSTEMS Offered as needed, 3 credit hours

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. Three hours lecture per week. Prerequisites: College Algebra (MATH 121) or permission of instructor.

#### CONS 370 TIMBER DESIGN Fall, 3 credit hours

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. Two hours lecture, four hours recitation per week. Prerequisites: Structural Analysis (CONS 336), or permission of instructor.

#### CONS 372 HIGHWAYS AND TRANSPORTATION Spring, 3 credit hours

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

### Course Descriptions: CIVIL/CONSTRUCTION

flow and design of parking is introduced. Three hours lecture per week. Prerequisites: Advanced Surveying (CONS 203), Civil Engineering Materials (CONS 280), or permission of instructor.

#### CONS 375 STRUCTURAL ENGINEERING DESIGN Spring, 3 credit hours

TThis course is an introduction to the design of structural steel, reinforced concrete and wood. This course is taught on the basis of statically determinate structures. Students are in-troduced to the Load and Resistance Factor (LRFD) and Allowable Stress Design (ASD). Analysis and selection of tension members, columns and beams is incorporated. Two 1-hour lecture and one 2-hour recitation per week. Prerequisites: Civil Engineering Materials (CONS 280) and Strength of Materials for Technicians (CONS 272) or permission of instructor.

#### CONS 385 HYDROLOGY AND HYDROGEOLOGY Fall, 4 credit hours

This course includes the study of surface and groundwater systems, with an emphasis on civil and envi-ronmental engineering related topics. Surface water topics include: principles of hydrology, hydrologic cy-cle, 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 in-troduce students to technologies and analytical methods used by industry to understand surface and groundwater systems. Three hours lecture, two hours laboratory per week. Prerequisites: Engineering Geology (CONS 285) or Civil Engineering Materials (CONS 280) or Soils in Construction (CONS 216); and Calculus I (MATH 161); or permission of the instructor.

#### CONS 386 Water quality

Fall, 4 credit hours

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. Three hours lecture, two hours laboratory per week. Prerequisites: Calculus I (MATH 161),

College Chemistry I (CHEM 150), or permission of the instructor.

#### **CONS 387**

## WATER AND WASTEWATER TREATMENT TECHNOLOGIES

Spring, 3 credit hours

The treatment of water is necessary to achieve the required quality necessary for a desired enduse. 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 addi-tional 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 courses. Specific topics include the physical, chemical, and biological treatment processes of water and wastewater streams. Students learn design concepts and system operations for water and wastewater treatment plants. There is also a discussion of related water and wastewater quality standards and regu-lations. Laboratory sessions demonstrate standard water and wastewater treatment practices that are currently used in industry. Prerequisites: College Chemistry I (CHEM 150) and MATH 161 (Calculus I); or permission of the instructor.

#### CONS 432 CIVIL DRAFTING AND DESIGN

Fall/Spring, 3 credit hours

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. Two hours lecture, three hours laboratory per week. Prerequisites: Hydraulics (CONS 122), Hydrology and Hydrogeology (CONS 385), Soils in Construction (CONS 216), Highways and Transportation (CONS 372), or permission of instructor.

#### CONS 472 ADVANCED HIGHWAY DESIGN Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Hydraulics (CONS 122), Hydrology and Hydrogeology (CONS 385), Soils in Construction (CONS 216), Highways and Transportation (CONS 372), or permission of instructor.

#### CONS 477 CAPSTONE PROJECT Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Completion of seven semester coursework (senior level status) or permission of the program director.

#### CONS 485 SOLID WASTE MANAGEMENT

Spring, 3 credit hours

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 be spent on solid waste landfill engineering 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. Three hours of lecture per week. Prerequisites: Hydrology and Hydrogeology (CONS 385), Soils in Construction (CONS 216) or permission of instructor.

#### CONS 486 SOIL AND GROUNDWATER REMEDIATION

Spring, 3 credit hours

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. Three hours of lecture per week. Prerequisites: Hydrology and Hydrogeology (CONS 385); and College Chemistry I and lab (CHEM 150); and Engineering Geology (CONS 285) or Civil Engineering Materials (CONS 280) or Soils in Construction (CONS 216); or permission from the instructor

#### CONS 487 WATER RESOURCES ANALYSIS, MANAGEMENT, AND DESIGN Spring, 3 credit hours

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 hours lecture per week. Prerequisites: Hydraulics (CONS 322), Hydrology and Hydrogeology (CONS 385), Introduction go

### Course Descriptions: CIVIL/CONSTRUCTION, DENTAL HYGIENE

Geographic Information Systems (CONS 350), or permission of instructor.

#### CONS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN CIVIL/ CONSTRUCTION ENGINEERING TECHNOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Civil/Construction Engineering Technology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

#### DHYG 140 PRE-CLINICAL DENTAL HYGIENE THEORY

Fall, 2 credit hours

This course is an introduction to dental hygiene theory including the dental hygiene process of care with emphasis on professionalism, basic instrumentation skills and patient assessment processes. A minimum grade of "C" is required. Department policy requires the student to achieve 75% proficiency in all dental hygiene courses to proceed to the next level of study. Students must be matriculated in the Dental Hygiene Program. Two hours of lecture per week. Corequisites: Pre-Clinical Dental Hygiene (DHYG 141), Preparation for the Patient Appointment (DHYG 142) , Oral Anatomy (DHYG 156) or permission of instructor.

#### DHYG 141 PRE-CLINICAL DENTAL HYGIENE Fall, 2 credit hours

This course prepares students to perform the specific skills outlined in the Dental Hygiene Process of Care. Emphasis is placed on professionalism, infection control, basic instrumentation skills and patient assessment processes. Patient assessment processes include conducting a medical history interview, documentation of vital signs, head and neck cancer screening exams, caries detection, assessment of deposits and an evaluation of the periodontium. This will be accomplished through lab demonstrations and clinical practice on manikin and/or lab partners, culminating with two patient experiences. All students must submit a comprehensive health history to the clinic coordinator prior to sitting as a practice patient in the clinic. A minimum grade of "C" is required. Department policy requires the student to achieve 75% proficiency in all dental hygiene courses to proceed to the next level of study. Students must be matriculated into the Dental Hygiene program, have CPR/AED and First Aid certification, and have proof of current malpractice insurance. Eight hours lab per week. Students must reserve 2 hours of additional time once a week to be spent further developing their clinical skills. Corequisites: Pre-Clinical Dental Hygiene Theory (DHYG 140), Preparation for the Patient Appointment (DHYG 142), Infection Control (DHYG 155), and Oral Anatomy (DHYG 156) or permission of instructor.

#### DHYG 142 PREPARATION FOR THE PATIENT APPOINTMENT

Fall, 1 credit hour

This course introduces the student to the OSHA infection control protocols that are designed to reduce the transfer of pathogens In the clinical setting. It also enables students to practice preparing the dental unit and treatment room for patient care. Students will learn and practice the technique for assessing vital signs, including pulse, respiration, and blood pressure, and to perform a head and neck cancer screening examination. This will be accomplished through lab demonstrations and clinical practice on a lab partner. Students must attend 2 hours of clinical practice each week. Pre-requisites: Must be matriculated in the Dental Hygiene program, have CPR/AED and First Aid certification, and have proof of current malpractice insurance. Co-requisites: Pre-Clinical Dental Hygiene Theory (DHYG 140), Pre-Clinical Dental Hygiene (DHYG 141), Infection Control (DHYG 155), and Oral Anatomy (DHYG 156) or permission of instructor.

#### DHYG 145 DENTAL RADIOLOGY Fall, 3 credit hours

Students will study the production, characteristics, and legal significance of x-rays and their use in the dental setting, the safety measures necessary for the protection of the operator and the patient, the exposure, processing, mounting and storage of films, errors in technique and their methods of corrections. A minimum grade of "C" is required. Students must be matriculated into the Dental Hygiene program. Two hours lecture, two hours laboratory per week. Corequisites: Pre-Clinical Dental Hygiene (DHYG 141), Infection Control (DHYG 155), Oral Anatomy (DHYG 156), or

#### DHYG 147 HEAD & NECK ANATOMY Spring, 2 credit hours

permission of instructor.

Students study the structure and anatomical systems of the head and neck and are exposed to selected body systems. Emphasis will be placed upon aspects of those systems and structures that have dental significance. This course provides the foundation for conducting a cancer screening exam in the clinical setting and the administration of local anesthesia as part of dental hygiene care. A minimum grade of "C" s required. Two hours of lecture per week. Corequisite: Clinical Dental Hygiene I (DHYG 151) or permission of instructor.

#### DHYG 150 DENTAL HYGIENE THEORY I Spring, 2 credit hours

This course elaborates and expands upon the theories presented in Pre-Clinical Dental Hygiene Theory (DHYG 140); and introduces additional information required when rendering individualized patient care. Specific topics will include dental considerations for patients with chronic diseases taking

medications that may impact one's dental health, recording and reading dental charts, recognizing varying levels of dental disease and determining appropriate interventions. Emphasis will be placed on instrument sharpening and utilization of the ultrasonic scaler to aid in effective removal of deposits. Students must also register for DHYG 151. A minimum grade of "C" is required to proceed to the next level of study. Two hours of lecture each week. Prerequisites: Pre-Clinical Dental Hygiene Theory (DHYG 140), Pre-Clinical Dental Hygiene (DHYG 141), Dental Radiology (DHYG 145), Infection Control (DHYG 155), Oral Anatomy (DHYG 156) and Histology & Embryology (DHYG 161) or permission of instructor. Corequisites: Head & Neck Anatomy (DHYG 147), Clinical Dental Hygiene I (DHYG 151), Dental Health Education (DHYG 159), Pathology (DHYG 160) and Radiographic Interpretation (DHYG 190) or permission

#### DHYG 151 CLINICAL DENTAL HYGIENE I Spring, 3 credit hours

This course is a continuation of Pre-Clinical Dental Hygiene (DHYG 141). Students will practice and develop their skills when assessing, planning and implementing care for the child, teen, adult and geriatric patient. Emphasis is placed on the healthy patient as well as patients with gingivitis or slight periodontitis. Although the department has a database of patients to work from, the student is responsible for recruiting new patients. A minimum grade of "C" is required to proceed to the next level of study. Students must have CPR/ AED and First Aid certification, and have proof of current malpractice insurance. Eight hours of clinic per week and 28 hours of laboratory instruction where students will learn dental charting, polishing, instrument sharpening, and how to audit a patients record. Prerequisites: Pre-Clinical Dental Hygiene Theory (DHYG 140), Pre-Clinical Dental Hygiene (DHYG 141), Prep for the Patient Appointment (DHYG 142), Dental Radiology (DHYG 145), Infection Control (DHYG 155), Oral Anatomy (DHYG 156), Histology & Embryology (DHYG 161) or permission of instructor. Corequisites: Head & Neck Anatomy (DHYG 147), Dental Hygiene Theory I (DHYG 150), Dental Health Education (DHYG 159), Pathology (DHYG 160), Radiographic Interpretation (DHYG 190), or permission of instructor.

#### DHYG 155 INFECTION CONTROL

Fall, 1 credit hour

This course provides an introduction to the microbial world. Students will receive an overview of the infectious diseases the dental team is potentially exposed to while providing treatment in the dental office, with a strong emphasis on hepatitis, tuberculosis, HIV, and the herpes viruses. Students will be presented with the rationale for practicing infection control procedures; including the use of appropriate PPE, proper equipment asepsis, and instrument processing. Students will also gain expe-

### Course Descriptions: DENTAL HYGIENE

rience developing various aspects of an office safety program. OSHA regulations and CDC guidelines provide the foundation for course content. A minimum grade of "C" is required. One hour of lecture per week. Prerequisite: Dental Hygiene matriculation or permission of instructor.

#### DHYG 156 ORAL ANATOMY

Fall, 2 credit hours

This is a hybrid course that blends traditional classroom time with online instruction. This course examines the structure and function of teeth and associated oral tissues and structures. In lab, the student has an opportunity to practice identifying teeth, landmarks in the oral cavity, describing gingiva, classifying occlusion, as well as individual and group malrelationships. A minimum grade of "C" is required. Students must be matriculated in the Dental Hygiene program. One hour lecture, two hours laboratory per week. Corequisite: Pre-Clinical Dental Hygiene Theory (DHYG 140), Pre-Clinical Dental Hygiene (DHYG 141)), Prep for the Patient Appointment (DHYG 142) or permission of instructor.

#### DHYG 159 DENTAL HEALTH EDUCATION

Spring, 2 credit hours

This course provides the necessary background for developing communication skills during individualized instruction in the clinic and group presentations within the community. Students will learn to assess the needs of a diverse population of patients; and will utilize that assessment information to critically develop a dental hygiene diagnosis and appropriate preventive treatment plan for a variety of patients. Throughout this course, students will be exposed to various preventive strategies that can be used to promote and maintain oral health. The student is expected to assess his/her oral communication skills and to develop either a patient education brochure that can be used chairside or design a bulletin board for the clinical area that portrays a preventive message to the observer. Minimum grade of "C" is required. Two hours lecture per week. Corequisite: Clinical Dental Hygiene I (DHYG 151) or permission of instructor.

#### DHYG 160 DENTAL PATHOLOGY

Spring, 2 credit hours

This course provides the student with a background in both oral and general pathology. A survey of pathologic foundations in the diagnosis process, normal and abnormal conditions of tissues of the body and the mouth, and correlation of physical and dental health in preparation for patient care in the clinical setting. A minimum "C" grade Is required. Two hours lecture per week. Prerequisites: Oral Anatomy (DHYG 156), Embryology & Histology (DHYG 161), or permission of instructor. Corequisite: Clinical Dental Hygiene I (DHYG 151), or permission of instructor.

#### DHYG 161 HISTOLOGY & EMBRYOLOGY Fall, 1 credit hour

This course provides the foundation for assessing a patient's oral health status in the clinical setting. During the assessment phase of care, the hygiene student must be capable of distinguishing normal, a variant of normal or a developmental abnormality from a pathology. This course contains basic, general histological information with a focus on oral tissues and oral facial development. A minimum "C" grade is required. One hour of lecture per week. Prerequisite: matriculation in the Dental Hygiene program or permission of instructor.

#### DHYG 190 RADIOGRAPHIC INTERPRETATION Spring, 2 credit hours

This course is a continuation of Dental Radiology (DHYG 145). Students will learn to identify and Interpret landmarks, dental materials, periodontal conditions, pathologies, decay and patient positioning errors seen radiographically on periapical, bitewing and panoramic radiographs. Students will work in small groups in lab to learn conventional panoramic radiology technique and exposure, as well as, develop their radiographic interpretation skills. A minimum grade of 75% is required in both lecture and lab prior to averaging grade for a total course grade. A minimum "C" grade is required. One hour of lecture and two hours of lab per week. Prerequisites: Pre-Clinical Dental Hygiene Theory (DHYG 140), Pre-Clinical Dental Hygiene (DHYG 141), Dental Radiology (DHYG 145), Oral Anatomy (DHYG 156) or permission of instructor. Corequisites: Clinical Dental Hygiene I (DHYG 151), Head & Neck Anatomy (DHYG 147) or permission of instructor.

#### DHYG 215 PAIN MANAGEMENT

Fall, 1 credit hour

This course is designed to prepare the dental hygiene student with the necessary theory to appropriately carry out treatment plans and successfully administer topical anesthesia, local infiltration anesthesia and/or nitrous oxide analgesia to increase patient comfort and control pain when providing dental hygiene services. This course is taught in a seminar format and includes fifteen hours of classroom instruction. Prerequisite: matriculation in the Dental Hygiene program, Oral Anatomy (DHYG 156), Head & Neck Anatomy (DHYG 147), and Infection Control (DHYG 155) with a minimum grade of "C". Corequisites: Dental Pharmacology (DHYG 221), Dental Hygiene II Lecture/ Lab (DHYG 250), and Clinical Dental Hygiene II (DHYG 251), or permission of instructor.

#### DHYG 220 PERIODONTOLOGY

Fall, 2 credit hours

Emphasis is placed on the structural anatomy of the periodontium, microbiology of plaque biofilm, and the pathology of periodontal disease. The student will learn to identify risk factors for periodontal disease, the various components of a comprehensive periodontal chart, treatment modalities utilized in the management of periodontally involved patients, appropriate maintenance intervals, as well as the criteria for determining appropriate referral to a periodontal specialist. A minimum "C" grade is required. Two hours lecture per week. Prerequisite: matriculation in the Dental Hygiene program, Dental Health Education (DHYG 159), or permission of instructor. Corequisite: Dental Hygiene II Lecture/Lab (DHYG 250), Clinical Dental Hygiene II (DHYG 251), or permission of instructor.

#### DHYG 221 DENTAL PHARMACOLOGY Fall, 2 credit hours

General concepts of drugs and drug action will be discussed in this course. Special emphasis will be given to drugs used in dentistry that may alter dental treatment. The course includes specific mechanisms of action and clinical applications of therapeutic agents which affect the central and peripheral nervous systems, the heart, the circulatory and renal systems, the respiratory and GI systems, and the endocrine system. Drugs to treat cancer and various infections are also discussed. Special consideration will be given to the topic of drugs for the pregnant patient and important drug interactions. Two hours lecture per week. Prerequisites: Anatomy and Physiology I & II (BIOL 217 & 218), or permission of instructor. Corequisite: Clinical Dental Hygiene II (DHYG 251) or permission of the instructor.

#### DHYG 240 DENTAL MATERIALS THEORY Fall, 2 credit hours

This course provides a general overview of the chemical and physical properties and structure of materials in dentistry. A combination of lectures, powerpoints and web assigned activities will prepare the dental hygiene student to develop the skills outlined in the NYS Dental Hygiene Practice Act. A minimum grade of "C" is required to proceed to the next level of study. Two hours lecture per week. Corequisite: Dental Materials Lab (DHYG 241) or permission of instructor.

#### DHYG 241 DENTAL MATERIALS LAB

Fall, 1 credit hour

This course enables the dental hygiene student to develop the skills outlined in the NYS Dental Assisting and Dental Hygiene Practice Acts. Skills are learned on a typodont in the lab prior to partner and/or patient practice in the clinical setting. Students will learn the foundation for these skills in Dental Materials Lecture (DHYG 240). A minimum grade of "C" is required to proceed to the next level of study. Three hours laboratory per week. Corequisite: Dental Materials Theory (DHYG 240) or permission of instructor.

## DHYG 250 DENTAL HYGIENE II LECTURE/LAB Fall, 2 credit hours

This course provides an opportunity for the

## Course Descriptions: DENTAL HYGIENE

dental hygiene student to practice and master proper technique when managing pain during a dental hygiene appointment. Successful completion of this course will enable the student to qualify for NYS certification in local anesthesia. Emphasis will also be placed on the following dental hygiene skills: extrinsic stain removal, utilization of the intraoral camera, digital radiography, utilization of desensitizing agents, management of the geriatric patient, advanced instrumentation techniques utilized when providing hygiene services for periodontally involved patients. One hour lecture, three hours of laboratory per week. Corequisites: Pain Management (DHYG 215), Peridontology (DHYG 220), Clinical Dental Hygiene II (DHYG 251), or permission of instructor. A minimum grade of "C" is required to proceed to the next level of study.

#### DHYG 251 CLINICAL DENTAL HYGIENE II Fall. 3 credit hours

This course is a continuation of Clinical Dental Hygiene I (DHYG 151) with continued emphasis on the dental hygiene process of care. Students will not only provide continued care for patients treated in the second semester but will also asses, plan and implement care for patients with advanced periodontal disease. Students are also expected to demonstrate more efficient time management skills so they are prepared to enter the workforce. A minimum grade of "C" is required to proceed to the next level of study. Students must have CPR/ AED and First Aid certification, and have proof of current malpractice insurance. Twelve clinical hours per week. Prerequisites: Head & Neck Anatomy (DHYG 147), Dental Hygiene Theory I (DHYC 150), Clinical Dental Hygiene I (DHYG 151), and Dental Pathology (DHYG 160), or permission of instructor. Corequisites: Pain Management (DHYG 215), Periodontology (DHYG 220), Dental Pharmacology (DHYG 221), Dental Materials (DHYG 240), Dental Materials Lab (DHYG 241), Dental Hygiene II Lecture/Lab (DHYG 250), or permission of instructor.

#### DHYG 256 MEDICAL EMERGENCIES IN THE DENTAL OFFICE

Fall, 1 credit hour

This course discusses the steps taken to reduce the risk of medical emergencies in the dental office; prepares the student to identify the early signs of various medical emergencies, and summarizes the steps taken to properly manage emergency situations while waiting for a paramedic to arrive on the scene. A minimum grade of "C" is required to proceed to the next level of study. One hour lecture per week.

#### DHYG 260 COMMUNITY DENTAL HEALTH

Spring, 2 credit hours

This writing intensive course is an introduction to the philosophy of community dental health and explores principles of community based oral health program assessment, planning, implementation, and

evaluation. In addition, fluoridation, epidemiology of dental diseases, and the use of biostatistical methods and materials for research are discussed. A minimum "C" grade is required to graduate. Prerequisite: matriculation in the Dental Hygiene program, or permission of the instructor. Corequisite: Clinical Dental Hygiene III (DHYG 270) or permission of the instructor.

#### DHYG 270 CLINICAL DENTAL HYGIENE III

Spring, 4 credit hours

This course is a continuation of DHYG 251 Clinical Dental Hygiene II with emphasis on individualized comprehensive dental hygiene care for the periodontally involved patient. Students will administer topical and local anesthesia to manage patient discomfort during scaling and root planing procedures. Each student will also have an opportunity to administer a locally delivered antimicrobial agent. Instructional labs will be utilized to acquire practice managing patients in specialty practices and alternative practice settings such as nursing homes. Students will also expand upon the pain management skills taught in DHYG 251 through the administration of nitrousoxide analgesia. Students must have current CPR/AED certification and malpractice insurance. A minimum "C" graduate is required to graduate. Three hours teaching laboratory; 12 clinical hours per week. Prerequisites: Pain Management (DHYG 215), Periodontology (DHYG 220), Pharmacology (DHYG 221), Dental Materials (DHYG 240) Dental Materials Lab (DHYG 241), Dental Hygiene II Theory (DHYG 250), Dental Hygiene II (DHYG 251), or permission of instructor. Corequisites: Senior Seminar (DHYG 285) and Special Needs Patients (DHYG 290), or permission of instructor.

#### DHYG 280 ETHICS & JURISPRUDENCE

Spring, 1 credit hours

This course is designed to show the relationship between the law and the dental profession; and to provide the hygiene student with the necessary skills to practice within the law. All students will complete a child abuse recognition training that will fulfill the necessary pre-requisite requirement for licensure in NYS. Students will not only recognize signs of abuse but will become familiar with the reporting protocols. All students will develop a resume and will have an opportunity to partake in a mock interview. The course will conclude with discussions on marketing and practice management techniques that will prepare students for entry into the workforce. A minimum "C" graduate is required to graduate. One hour lecture per week. Prerequisite: matricuatlion in the Dental Hygiene program or permission of the instructor.

#### DHYG 285 SENIOR SEMINAR

Spring, 1 credit hour

This capstone course emphasizes case based learning, which involves the integration of theory, knowledge, and research and its individualized practical application to patient care. Students will review cases and apply the knowledge accumulated in their two years of dental hygiene studies to plan and manage care for the pediatric, geriatric, adult, periodontal, and the medically compromised patient. The course is designed to prepare students for the dental hygiene licensing exams. All students will participate in a pretest and a mock national examination. Prerequisites: matriculation in the Dental Hygiene program and Clinical Dental Hygiene II Lecture/Lab (DHYG 250), Clinical Dental Hygiene II (DHYG/251) or permission of the instructor.

#### DHYG 290 SPECIAL NEEDS PATIENTS

Spring, 1 credit hour

This course will heighten the hygiene student's understanding of the dental needs of patients with varying medical conditions as well as those with physical, sensory and emotional conditions that can impact a patient's oral health and require modified care during the dental appointment. Understanding the dynamic oral-systemic link will enable the student to develop appropriate treatment plans and provide individualized, patient centered care for all patients. A minimum grade of "C" is required. One hour lecture per week. Prerequisite: matriculation into the Dental Hygiene program or permission of the instructor.

#### DHYG 310 CONTEMPORARY ISSUES IN DENTAL HYGIENE

Spring, 3 credit hours

This course examines current societal and professional issues and their impact on dental hygiene practice. The student will discuss the Healthy People 2020, including issues, trends, disparities and opportunities. Students will examine the roles of the dental hygienist and discuss the dental hygienists' role in increasing access to dental care. Students will research and compare traditional and alternative practice models, and propose changes to improve dental care delivery. This is a writing intensive course in which the student will prepare a manuscript for publication following ADHA author guidelines. Three hours lecture per week.

## DHYG 340/BSAD 340 MANAGEMENT COMMUNICATIONS Fall/Spring, 3 credit hours

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 will be developed. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) and junior level status or the permission of the instructor.

#### DHYG 350 CURRENT ISSUES IN PERIODONTICS Fall, 3 credit hours

Students taking this course will research and discuss current studies in periodontology and related disciplines to identify factors which may modify theory or practice. Focus will be placed on the relationship of periodontal health to systemic health, current concepts in etiology, risk factors, assessment, and treatment. Three hours lecture per week.

#### DHYG 360 DENTAL HYGIENE TEACHING METHODOLOGY

Fall, 4 credit hours

This course provides the dental hygienist with the background to become an effective classroom and clinical instructor. Students will discuss the current philosophy of dental hygiene education and the American Dental Associations' accreditation requirements regarding course syllabi, instructional objectives, learning experiences, evaluation procedures and remediation policies. Students will explore the various learning styles and classroom techniques that can be utilized to incorporate all learning styles, motivate the learner and enhance the learning process. Four hours lecture per week.

#### DHYG/NURS 370 RESEARCH METHODS IN SOCIAL AND HEALTH SCIENCES

Fall/Spring, 3 credit hours

This course provides an intense comprehensive study of the scientific research process utilized in the social and health sciences. Students will be trained to be critical consumers of published research and will be expected to complete a research project. Topics that will be covered include the underlying theory of research; and data management and presentation. Three hours lecture per week. Prerequisite: Introduction to Psychology (PSYC 101), or Introduction to Sociology (SOCI 101), or Introduction to Science and Technology of Behavior (SSCI 245), or Principles of Macroeconomics (ECON 101), or Principles of Microeconomics (ECON 103); Statistics (MATH 141) or equivalent course work, and Expository writing (ENGL 101) or Oral and Written Expression (ENGL 102); or permission of the instructor. Additionally, students must have at least junior level status or permission of the instructor.

#### DHYG 385 ORIENTATION TO INTERNSHIP Fall, 1 credit hour

An internship is required to complete degree requirements for the Bachelor of Technology in Dental Hygiene. This course is a pre-requisite course that will provide students with a clear sense of direction and will enhance success in DHYG 390. The instructor will discuss best practices when searching for internship opportunities as well as the fundamentals for developing an internship contract that meets SUNY Canton guidelines. Students are expected to identify their anticipated goals and will submit timeline for completing the proposed internship. Students will also be provided with

some guidance for documenting daily reflections and activities in a journal and tips for building a professional portfolio. One hour lecture per week.

#### DHYG 390 DENTAL HYGIENE INTERNSHIP Spring, 6 credit hours

This internship course enables students to acquire practical experience in a variety of professional settings that draw on concepts and skills gained from the academic experience. Students will develop new knowledge and skills by taking an active role in the cooperating organization. Students will develop an internship contract based on personal interests and career aspirations. Internship proposals must be presented and approved prior to registration for the course. Students must complete a minimum of 240 hours of internship study. Placement cannot be in their workplace.

#### DHYG 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN DENTAL HYGIENE Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in dental hygiene.

#### EADM 201 FUNDAMENTALS OF EMERGENCY MANAGEMENT: HISTORY, PERSPECTIVES, AND THEORIES Fall, 3 credit bours

This course presents the theories, principles, and approaches to emergency management. The philosophy of Comprehensive Emergency Management (CEM) will be discussed with the four attendant steps of: mitigation, preparedness, response, and recovery. An analysis of past disasters will be presented along with their impacts on policy formation leading up to the current FEMA all-hazards approach. The role, duties, and importance of the Emergency Manager will be discussed throughout the semester. Finally, a brief review of basic legal issues involving emergency management will be presented. Three hours lecture per week.

#### EADM 205 RISK & HAZARD IMPACT STUDIES Fall, 3 credit hours

The course focuses on a generalized technical understanding and an awareness of various types of natural hazards. Central to the course is the understanding of technical cooperation regarding hazard and vulnerability assessments, inclusion of hazard mitigation measures in the formulation of investment projects, use of geographic information systems for mapping and analysis, and urban watershed planning for hazard and resource management. The course includes some, but not all, of the disaster mitigation and integrated development planning. Three hours lecture per week. Prerequisites/corequisites: Fundamentals of Emergency Management: History, Perspectives and Theories (EADM 201), GER Math and Introductions to Information Technology (CITA 110) or permission of instructor.

#### EADM 220 DISASTER MANAGEMENT & PREPAREDNESS

Spring, 3 credit hours

The course presents new and innovative methods for preparing communities and organizations to address general and substantial risk of disasters and emergencies in the workplace. It encompasses the tactics used by safety experts and additionally focuses on expanded proactive measures to safeguard lives and assets from natural disasters to acts of terrorism. Focuses of the course include planning, assessing and responding to potential threats, decreasing potential harm and recovery considerations at the community and organizational level. Three hours lecture per week. Prerequisite: Fundamentals of Emergency Management: History, Perspectives, and Theories (EADM 201), Risk & Hazard Impact Studies (EADM 205) or permission of instructor.

#### EADM 222 COMMUNITIES: PREPAREDNESS & DEFENSE

Spring, 3 credit hours

The course prepares participants to help reduce the growing toll (deaths and injuries, property loss, environmental degradation, business and economic disruption) associated with disasters in the United States by providing an understanding of these processes and technologies (hazards risk management process) that organize preparedness and response in a constructive framework that may be applied at all levels of communities and government service organizations. Presents a natural and technological risk analysis, applies the four phases of Comprehensive Energy Management (CEM), and stresses development of personal and community emergency plans. Three hours lecture per week. Prerequisites: Fundamentals of Emergency Management: History, Perspectives, and Theories (EADM 201) or permission of instructor.

#### EADM 307 LEGAL ISSUES IN E&D Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral & Written Expression (ENGL 102), and Risk and Hazard Impact Studies (EADM 205) or permission of instructor.

#### EADM 400 INCIDENT COMMAND: SYSTEM COORDINATION & ASSESSMENT Fall, 3 credit hours

The Incident Command System (ICS) is the nationally recognized system for managing emergencies and disasters. Several states and federal agencies have adopted ICS as their standard for emergency management. ICS provides education and training

for those who are not first responders (i.e., law enforcement, fire, or emergency medical services personnel) who may be called upon to function in an ICS environment. The course includes a large number of scenarios, examples, and opportunities for students to apply what they have learned. Three hours lecture per week. Prerequisite: Risk & Hazard Impact Studies (EADM 205) or permission of the instructor.

#### EADM 430 SIMULATED DISASTER TRAINING Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites/corequisites: Management Communications (BSAD 340) and Incident Command: System Coordination & Assessment (EADM 400) or permission of instructor.

#### EADM 435 DISASTER SIMULATION Spring, 6 credit hours

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. Six hours lecture per week. Prerequisite: Simulated Disaster Training (EADM 430) or permission of instructor.

#### EADM 480 INTERNSHIP IN EMERGENCY AND DISASTER MANAGEMENT

Fall/Spring, 3, 6 or 9 credit hours

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, 6, or 9 credit hours

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. Prerequisite: Incident Command: System Coordination & Assessment (EADM 400) or permission of instructor.

#### ECHD 101 INTRODUCTION TO EARLY CHILDHOOD

Fall, 3 credit hours

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 primary teachers have in fostering the well-being and development of young children from birth-6 years. Observation of children is an integral part of the learning process in this course. Three hours lecture per week.

#### ECHD 121 WELLNESS IN YOUNG CHILDREN: PROMOTING HEALTH, SAFETY, NUTRITION, AND DEVELOPMENT Fall, 3 credit hours

A combination of lecture, discussion, and exercises designed to develop the knowledge and skills necessary for working with young children. This course focuses on integrating health, safety, and nutritional activities into early childhood settings to promote the well-being of children. Three hours lecture per week. Prerequisite: Introduction to Early Childhood (ECHD 101) or permission of instructor. ECHD majors only.

#### ECHD 123 STUDENT TEACHING ORIENTATION Spring, 1 credit hour

The Student Teaching Orientation will prepare students for their internship experiences in Early Childhood. Students will become familiar with field work requirements, policies and procedures, professionalism, ECE programs, the role of the college supervisor and site mentor, and the responsibilities and expectations of the student teaching experience. One hour lecture per week. Prerequisite: Introduction to Early Childhood (ECHD 101). Corequisite: Curriculum Development (ECHD 125) or permission of instructor. ECHD majors only.

#### ECHD 125 CURRICULUM DEVELOPMENT

Spring, 3 credits hours

This course will examine developmentally appropriate practices and curriculum methods in early care and education. Students will create and implement lessons, activities and units that promote the development of the whole-child. Special emphasis will be given to the process of curriculum development, curriculum methods, child-centered planning and active learning experiences for children. ECHD majors only. Three hours lecture per week. Prerequisite: Introduction to Early Childhood (ECHD 101). Corequisite: Student Teaching Orientation (ECHD 123) or permission of instructor.

#### ECHD 131 INFANTS AND TODDLERS

Spring, 3 credit hours

Supporting the social, cognitive, emotional, and physical development of children under the age of 3 years requires that their caregivers have a solid understanding of child development, developmentally appropriate practice, and child guidance for young children. This course will explore these content areas fully and challenge students to integrate their knowledge into a framework for guiding responsible decision-making in providing optimal high quality care for infants and toddlers. Sensitivity to diverse family and cultural perspectives and the needs of children with disabilities is imbedded throughout the course. Three hours lecture per week. Prerequisite: Introduction to Early Childhood (ECHD 101) or permission of instructor. ECHD majors only.

#### ECHD 200 PLANNING PROGRAMS FOR YOUNG CHILDREN

Spring, 3 credit hours

Students apply concepts of developmentally appropriate practice as they relate to the design of programs for young children. The curriculum will be viewed from the perspective of program philosophy, physical environment, materials selection/arrangement, learning centers and scheduling. Principles of program planning related to high quality early care and education, administration and leadership will be applied. Three hours lecture per week. Prerequisite: Introduction to Early Childhood (ECHD 101) or permission of instructor. ECHD majors only.

#### ECHD 201 STUDENT TEACHING EXPERIENCE I W/ SEMINAR

Fall, 4 credit hours

This course is an off-campus practicum in early childhood. Students are assigned to a child care, Head Start, pre-k or kindergarten setting and work under the direct supervision of a classroom teacher. Students are required to complete an 80-hour student teaching experience applying the knowledge and skills acquired through coursework. Students will observe, participate, plan, and implement lessons and activities throughout their experience. Students are required to attend one-hour weekly seminars to reflect on their development and field experiences, lead by the college supervisor. Prerequisites: minimum 2.0 GPA in Introduction to Early Childhood (ECHD 101), Student Teaching Orientation (ECHD 123), and Curriculum Development (ECHD 125), or permission of instructor. ECHD majors only.

#### ECHD 202 STUDENT TEACHING EXPERIENCE II W/ SEMINAR

Spring, 6 credit hours

This course is an off-campus practicum in early childhood. Students will further develop and apply their knowledge and skills in an early childhood classroom. Students are responsible for planning and implementing weekly child-centered cur-

### Course Descriptions: EARLY CHILDHOOD, ECONOMICS

riculum. Training and supervision are provided by an on-site mentor and the college supervisor. One hundred twenty clock hours of supervised fieldwork at an assigned early childhood program. Students are required to attend one-hour weekly seminars to reflect on their development and field experiences, lead by the college supervisor. Prerequisite: Student Teaching Experience I w/Seminar (ECHD 201) with a minimum grade of C+ or permission of instructor. ECHD majors only.

#### ECHD 250 CHILDREN WITH SPECIAL NEEDS Fall, 3 credit hours

This course will explore 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 and children. Three hours lecture per week. Prerequisite: Introduction to Early Childhood (ECHD 101) and Child Development (PSYC 220) or permission of the instructor.

#### ECHD 285 ISSUES & POLICIES IN EARLY CARE & EDUCATION

Spring, 3 credit hours

Students will draw from academic, life and student teaching experiences 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. Three hours lecture per week. Prerequisite: Introduction to Early Childhood (ECHD 101) or Introduction to Sociology (SOCI 101) or Introduction to Psychology (PSYC 101) and have earned more than 30 credit hours or permission of instructor. Writing intensive course.

#### ECHD 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN EARLY CHILDHOOD Fall/Spring, 1-4 credit hours

Individual courses of instruction of variable credit (1–4 credits) may be offered each semester. These courses are designed to expand on topics in specific areas of early childhood. Prerequisite: depends on the nature of each course.

## ECON 101 PRINCIPLES OF MACROECONOMICS Fall/Spring, 3 credit hours GE

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. Three hours lecture per week.

#### **ECON 103**

#### PRINCIPLES OF MICROECONOMICS

Fall/Spring, 3 credit hours GER 3

This course provides a study of supply, demand, elasticity, theory of the firm, market structures, government regulation, marginal productivity theory, and selected contemporary economic issues. Three hours lecture per week. Prerequisite: Macroeconomics (ECON 101) or GER Math or permission of instructor.

#### ECON 105 SURVEY OF AMERICAN ECONOMIC HISTORY

Spring, 3 credit hours GER 4

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. Three hours lecture per week.

#### ECON 120 INTRODUCTION TO LABOR STUDIES Fall/Spring, 3 credit hours

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. Three hours lecture per week.

#### ECON 201 ECONOMICS AND SOCIAL ISSUES

Fall/Spring, 3 credit hours GER 3

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. Three hours lecture per week.

## ECON 301 REGIONAL ECONOMIC DEVELOPMENT IN AFRICA

Fall/Spring, 3 credit hours GER 6

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) will be 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 credits if different regions. Three hours lecture per week. Prerequisites: Macroeconomics (ECON 101), or

Microeconomics (ECON 103), or Introduction to Sociology (SOCI 101), or Statistics (MATH 141) or permission of the instructor.

#### ECON 305 ECONOMICS OF CRIME Fall/Spring, 3 credit hours

This course examines the behavior of criminals and uses economic concepts to analyze crimes of violence, crimes against property, and the markets for illegal goods and services. Topics 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 effectiveness 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. Three lecture hours per week. 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 HEALTH CARE Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103), and a minimum 45 credit hours, or permission of instructor.

#### ECON 314 MANAGERIAL ECONOMICS

Spring, 3 credit hours GER 3

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. Three hours lecture per week. Prerequisites: Foundations of Financial Accounting (ACCT 101) and student must have met the General Education Requirement in Math, or Principles of Microeconomics (ECON 103), or permission of instructor.

#### ECON 315 GLOBAL ECONOMY Fall, 3 credit hours

GER 6

Students examine the historical development of the global economy and the increasing interdepen-

### Course Descriptions: ECONOMICS, EDUCATION, ELECTRICAL

dence 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. Three hours lecture per week. 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 hours

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. Three hours lecture per week. Prerequisites/corequisites: 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.

#### ECON 330/FSMA 330 FINANCIAL MARKETS AND INSTITUTIONS

Fall/Spring, 3 credits

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, and pension funds. In addition, it provides a comprehensive introduction to risk management within the framework of financial services industry. Three hours lecture per week. Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103), and a minimum 45 credit hours, or permission of instructor.

#### ECON 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ECONOMICS

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in economics.

#### EDUC 210 PRINCIPLES OF EDUCATION

Fall/Spring, 3 credit hours

This course provides an overview of the historical, sociological, and philosophical foundations of education in North America. Students will explore the characteristics and needs of children, and the goals and objectives of early childhood and elementary education. A study of the nature of knowledge and learning, teaching theories and strategies based

on effective instructional models, philosophies of teaching, the changing educational role of the teacher, and attitudes, values and professional ethics relating to educators. The course will examine curriculum programs, pedagogy, and the importance of evaluation, assessment, and accountably in teaching and education. May include observations in classroom settings. Pre-requisites/Co-requisites: 15 college credits including ENGL 101/102 or permission of instructor.

#### EDUC 300 THE PEDAGOGY & TECHNOLOGY OF ON-LINE LEARNING

Fall/Spring, 3 credit hours

This course will provide the student with fundamental information with which to design and deliver an effective On-line Distance Learning course. In doing so, aspects of pedagogy, methodology, and technique will be integrated with elements of course design and structure. Three hours lecture per week. Prerequisites: Junior level status and 2.5 GPA with prior education courses or teaching experience, or permission of instructor.

#### EDUC 291-295, 391-395 OR 491-495 SPECIAL TOPICS: EDUCATION

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered by other courses currently available. These courses are designed to expand on topics in specific areas of education or current issues in the professional field of education.

## ELEC 101 ELECTRIC CIRCUITS I Fall, 3 credit hours

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, Norton's, and Maximum Power Transfer. Students will develop computational skills. Three hours lecture per week. Corequisite: Pre-Calculus

(MATH123) or permission of instructor.

## ELEC 102 ELECTRIC CIRCUITS II Spring, 3 credit hours

A continuation of Electric Circuits (I), stressing the understanding of AC analysis that involves resistive, capacitive, and inductive circuits. Also, impedance, resonance, filters and transformers are covered. Students will analyze circuits of various configurations and enhance computational skills. Three hours lecture per week. Prerequisite: Electric Circuits I (ELEC 101) and Pre-Calculus (MATH123) or permission of instructor.

#### ELEC 109 ELECTRIC CIRCUITS I LABORATORY Fall, 1 credit hour

An introductory laboratory course stressing the understanding of basic concepts and principles

of direct current and voltage circuits by analyzing resistive, capacitive and inductive circuits through practical laboratory application. Students will also study circuits using circuit analysis software. Two hours laboratory per week. Corequisite: Electric Circuits I (ELEC 101) and Pre-Calculus (MATH123) or permission of instructor.

## ELEC 129 ELECTRIC CIRCUITS II LABORATORY Spring, 1 credit hour

A continuation of Electric Circuits 1 Laboratory, stressing the understanding of AC analysis that involves resistive, capacitive, and inductive circuits. Also, impedance, resonance, filters and transformers are covered. Students will study circuits of various configurations using practical laboratory application/equipment. Two hours laboratory per week. Prerequisite: Electric Circuits I Laboratory (ELEC 109) and Pre-Calculus (MATH123) or permission of instructor.

#### ELEC 141 INDUSTRIAL CONTROLS

Spring, 2 credit hours

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 Micro LoGix 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. Four hours laboratory per week. Prerequisite: Electric Circuits I and Laboratory (ELEC 101/109), Digital Fundamentals and Systems (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 FABRICATION Fall, 2 credit hours

Stresses practical fabrication techniques used in electronic and communication industries. Focuses on aspects of designing, installing, testing and troubleshooting fabrication methods used in assembly and repair of electronic equipment. One hour lecture, two hours laboratory per week.

#### ELEC 165 DIGITAL FUNDAMENTALS & SYSTEMS Fall/Spring, 3 credit hours

This course covers topics include: number systems, operations and codes, logic gates, Boolean algebra and logic simplification, combinational logic analysis, functions of combinational logic, latches, flip-flops, timers, and counters. Three hours of lecture per week. Prerequisites: Electric Circuits 1 and Laboratory (ELEC 101/109), or permission of instructor.

### Course Descriptions: ELECTRICAL

#### ELEC 166

## DIGITAL FUNDAMENTALS & SYSTEMS LABORATORY

Fall/Spring, 1 credit hour

This is a digital laboratory course with emphasis on topics include: Logic Gate Systems, Arithmetic Systems, Code Converters, Multiplexer and De-multiplexer, JK Flip-Flop Circuits, Counters, Shift Registers, Timers, Matrix Keypad Encoder, Serial and Parallel Data Transfer, Digital Circuit Troubleshooting. Two hours of laboratory per week. Prerequisites: Electric Circuits I/Lab (ELEC 101/109), corequisite: Digital fundamentals and Systems (ELEC 165), or permission of instructor.

# ELEC 171 ELECTRICAL CONSTRUCTION AND MAINTENANCE I (Certificate Program) Fall, 7 credit hours

Instruction includes fundamentals of AC and DC circuits, magnetism, DC motors and generators, use of electrical test instruments and the National Electric Code. Laboratory projects include cable, conduit and surface raceway wiring installations plus projects related to the theoretical concepts listed above. CERTIFICATE/A.A.S. ELECTIVE CREDIT ONLY. Three hours lecture, eight hours laboratory per week.

# ELEC 172 ELECTRICAL CONSTRUCTION AND MAINTENANCE II (Certificate Program) Spring, 7 credit hours

Continuation of Electrical Construction and Maintenance I. Includes additional instruction in basic AC system theory, three phase circuits, motors and motor control, transformer theory and connections. Laboratory projects include diagnosis and repair of electrical equipment including major appliances, motors and motor starters, and transformer connections. CERTIFICATE/A.A.S. ELECTIVE CREDIT ONLY. Three hours lecture, eight hours laboratory per week. Prerequisite: Electrical Construction and Maintenance I (ELEC 171).

# ELEC 173 INTRODUCTION TO THE ELECTRICAL CODE (Certificate Program) Fall, 3 credit bour

This introductory course will cover the basics of understanding the current National Electrical Code, with electrical drawing illustrations. Topics include circuit, overcurrent 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. Three

#### ELEC 203 ENGINEERING TECHNOLOGY PROJECT Spring, 1 credit hour

hours lecture per week for five weeks.

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/Communication Systems. All project proposals must be approved by course instructor. Three hours laboratory per week. Prerequisites: Electrical Energy Conversion (ELEC 215), Industrial Controls (ELEC 141), Electronic Circuits (ELEC 231), Senior level in AAS program, or permission of instructor.

#### ELEC 213 MICROPROCESSORS

Fall, 3 credit hours

The 8085 8-bit microprocessor instruction set and the internal hardware register structure are studied. The basic operations of the Fetch and Execute operations are examined. The student will generate several machine programs for interfacing input and output devices to the microprocessor. The PIC micro family or the STAMP 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. A writing intensive course. Two hours lecture, three hours laboratory per week. Prerequisite: Digital fundamentals and Systems and Digital fundamentals and Systems Laboratory (ELEC 165/166) or permission of instructor.

## ELEC 215 ELECTRICAL ENERGY CONVERSION Fall/Spring, 4 credit hours

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 synchronous motor and single-phase motor principles and operation. Single-phase/threephase transformer theory and circuit interrupting devices are also covered. Basic power transmission line circuit concepts and alternative (Green) electrical power generation methods are also investigated. Hands-on laboratory experiments are performed to reinforce the theory for each of the covered topics. Three hours lecture and three hours laboratory per week. Prerequisites: Electric Circuits II and Laboratory (ELEC 102/129) Calculus I (Math 161), or permission of instructor.

## ELEC 225 TELECOMMUNICATIONS Spring, 3 credit hours

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, (Copper, Fiber, and Satellite), Switching Hierarchy of North America (PSTN), wave propagation, line devices, Modulations, Multiplexing, Noise, Error detection, correction, and

control, Transmission lines, ISDN/DSL LAN, and Security and introduction to Antennas. Three hours lecture and two hours laboratory per week. Prerequisite: Electronic Circuits (ELEC 231), Calculus I (Math161), or permission of instructor.

## ELEC 231 ELECTRONIC CIRCUITS Fall, 4 credit hours

Basic theory and circuit applications of silicon, germanium, zener, light emitting (LED) and Schottky diodes, bipolar and field effect transistors (FET) are 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. Three hours lecture and three hours lab per week. Prerequisites: Electric Circuits I and Laboratory (ELEC 101/109), Electric Circuits II and Laboratory (ELEC 102/129), Calculus I (Math 161), or permission of instructor.

## ELEC 232 INDUSTRIAL ELECTRONICS Fall, 4 credit hours

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 noninverting amplifiers. Subtraction, summing (mixer), difference and compound amplifiers and active filters. Operational amplifier 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. Three hours lecture, three hours laboratory per week. Prerequisite: Electronic Circuits (ELEC 231), Calculus I (Math 161), or permission of instructor.

#### ELEC 243 COMPUTER-AUTOMATED CONTROL SYSTEMS

Spring, 2 credit hours

An introduction to some of the control software systems in use in industry. The student is introduced to structured PIC 16f877 micro family programs to the extent that various control functions can be identified and modified. Memory addressed I/O and the relationship of memory location access (analog and digital) by a PIC microcontroller program. Several computer interfaces and motor-control circuits including stepper motor interfaces are studied. One hour lecture, three hours laboratory per week. Prerequisites: Electronic Circuits (ELEC 231), Industrial Controls (ELEC 141), Microprocessors (ELEC 213) or permission of instructor.

### Course Descriptions: ELECTRICAL

## ELEC 261 ELECTRICITY Fall, 4 credit hours

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 of control devices such as relays, contactors and switches is studied. Also, basic number systems and digital logic functions are introduced. Three hours lecture, three hours laboratory per week. Prerequisite: College Algebra (MATH 121) or Pre-Calculus (MATH 123) or permission of instructor.

#### ELEC 263 ELECTRIC CIRCUITS

Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Calculus II (MATH 162), University Physics II (PHYS 132), or permission of instructor.

#### ELEC 332 INDUSTRIAL POWER ELECTRONICS Fall, 3 credit hours

This course is designed to prepare students with industrial electronics skills necessary to function as technologist. Topics include: Solid States Devices, Photo-Electronics, Inverters, Power Supplies, Operational Amplifiers, Open/Closed Loop Feedback Systems, SCRs, TRIACs, Thyristors, Photosensitive devices, Optically Coupled Devices, Timer Control Circuits, Motor Control Devices, and Process Control Devices. Note: Credit is given to a student who has taken ELEC232 with a (C) grade or better. Two hours lecture, two hours laboratory per week. Prerequisites: Electronic Circuits (ELEC 231), Calculus I (Math 161), or permission of instructor.

#### ELEC 343 ADVANCED CIRCUIT ANALYSIS Fall, 3 credit hours

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, Variable-Frequency Network Performance, Polyphase Circuits, and AC Steady-State Analysis. Three hours of lecture per week. Prerequisites: Electric Circuits II and Laboratory (ELEC 102/129), Calculus II (MATH 162) or permission of instructor.

## ELEC 375 FIBER OPTIC COMMUNICATIONS Spring/Fall, 3 credit hours

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. Two hours lecture, two hours laboratory per week. Prerequisites: Electronic Circuits (ELEC 231) or permission of instructor.

#### ELEC 380 LAN/WAN TECHNOLOGY Spring, 3 credit hours

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, and Integrated Services Data Networks (ISDN). Two hours lecture, two hours laboratory per week. Prerequisites: Telecommunications (ELEC 225) or permission of instructor.

#### ELEC 383 POWER TRANSMISSION AND DISTRIBUTION

Spring, 3 credit hours

This course in electrical power generation and transmission will emphasis 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, Protective Relays, Direct Current Transmission, HVDC Light Transmission System, Power Stability, and Cost of Electricity. Two hours lecture, two hours laboratory per week. Prerequisites: Electrical Energy Conversion (ELEC 215) or permission of instructor.

## ELEC 385 ELECTRONIC COMMUNICATIONS I Spring, 3 credit hours

This is 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. Two hours lecture, two hours laboratory per week. Prerequisites: Telecommunications (ELEC 225) Electronic Circuits (ELEC 231), Calculus II (Math 162) or permission of instructor.

## ELEC 386 ELECTRONIC COMMUNICATIONS II Fall, 3 credit hours

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. Two hours lecture, two hours laboratory per week. Prerequisites: Electronic Communications I (ELEC 385) or permission of instructor.

#### ELEC 405 SATELLITE COMMUNICATIONS Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Electronic Communications I (ELEC 385) or permission of instructor.

## ELEC 416 MICROELECTRONICS CIRCUIT DESIGN Fall, 3 credit hours

This course will analyze analog electronic circuits, digital electronic circuits, and the foundations of electronic circuit design. Topics covered include: Operational amplifier circuit design, Integrated circuit biasing and active loads, Differential and multistage amplifiers, Feedback and stability, Operational Amplifier Circuits, Nonideal Effects in Operational Amplifier circuits, and Applications and design of integrated circuits. Laboratory exercises required [Selected design projects]. Two hours lecture, two hours laboratory per week. Prerequisites: Industrial Power Electronics (ELEC 332), Electronic Circuits (ELEC 231), Calculus II (Math 162), or permission of instructor.

## ELEC 436 BIOMEDICAL ELECTRONICS

Spring, 3 credit hours

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. Two hours lecture, two hours laboratory per week. Prerequisites: Microelectronics Circuit Design (ELEC 416), Calculus II (MATH 162), or permission of instructor.

#### ELEC 477 CAPSTONE PROJECT Spring, 3 credit hours

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, and etc. All projects must be approved by course faculty. This course is considered writing intensive. Prerequisites: Completion of seven semesters coursework or permission of instructor. Students must spend 160 hours outside class time on the project. Note: All students in this course must take the pre- graduation exit examination as part of this capstone course.

### Course Descriptions: ELECTRICAL, ENGLISH

#### ELEC 488 ELECTRICAL POWER SYSTEMS

Spring, 3 credit hours

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. The course address the energy economics, efficiency and ethics of dynamic pricing and smart meters. The course also delivers topics on smart grid supply that integrate renewable and distributed generation (i.e. photovoltaic and wind). Two lecture hours and two lab hours per week. Prerequisites: Electrical Energy Conversion (ELEC 215), Power Transmission and Distribution (ELEC 383), Calculus II (Math 162), or Permission of the instructor.

#### ELEC 292-295, 391-395, OR 491-495 SPECIAL TOPICS IN ELECTRICAL TECHNOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Electrical Technology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

#### ENGL 097 INTRODUCTION TO ACADEMIC READING AND WRITING

Fall/Spring, 4 equivalent credits

This course aims to enhance literacy skills required in an cademic setting. Students will learn various reading strategies to comprehend, evaluate, and appreciate academic texts. In addition, this course covers fundamental rhetorical strategies for academic writing with an overview of basic writing mechanics and rammar. Additional tutorials (with class instructor, the Writing Center, EOP and/or Accommodative Service tutors) may be required

#### ENGL 098 BASIC WRITING

Fall/Spring, 3 equivalent credits

This course focuses on the development of academic writing skills with an overview of grammar and mechanics. Students will also learn basic rhetorical strategies and expand their vocabulary. Three hours lecture per week. Additional tutorials (with class instructor, the Writing Center, EOP and/ or Accommodative Service tutors) may be required.

#### ENGL 101 EXPOSITORY WRITING

Fall/Spring, 3 credit hours GER 10

This course is designed to help students communicate effectively, with an emphasis on academic writing and critical reading skills. Students will develop critical thinking skills, rhetorical knowledge, basic research skills, knowledge of conventions, and communication ethics. This course is an alternate to ENGL 102 Academic Communication: students cannot take both.

#### ENGL 102 ORAL AND WRITTEN EXPRESSION

Fall/Spring, 3 credits GER 10

This course is designed to help students effectively communicate orally and in writing. Students will develop presentation skills, critical thinking skills, rhetorical knowledge, basic research skills, knowledge of conventions, and communication ethics. This course is an alternate to ENGL 101 College Writing: students cannot take both.

#### ENGL 201 WRITING IN THE ARTS AND SCIENCES Spring, 3 credit hours

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. Three hours lecture. Prerequisite: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) or permission of the instructor.

#### ENGL 202 CREATIVE NON-FICTION

Fall/Spring, 3 credits

This course will provide opportunities for the student 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—memoirs, nature writing, lyrical essays, magazine features, webpage content, etc.—students will learn to write essays that are not only persuasive but enjoyable. Each student will design writing situations according to interests and will develop imaginative essays of creative nonfiction. A liberal arts writing intensive course. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) OR Oral and Written Expression (ENGL 102) OR an equivalent course OR permission of instructor.

#### ENGL 203 WORLD LITERATURE: B.C. TO 16TH CENTURY

Fall, 3 credit hours GER 7

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 hours GER 7

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 hours GER 7

This is a survey course which will begin with the study of old English literature from 450 AD through 1800 AD. Students will study the important writers, their representative works, the historical, social, and political background for each period and the cultural changes and developments of the eras. Three hours lecture per week.

#### ENGL 206 SURVEY OF ENGLISH LITERATURE II

Spring, 3 credit hours GER 7

A study of English literature of the Romantic through Post-Victorian period. Students will study the important writers, their representative works, the historical, social, and political background for each period and the cultural changes and developments. Three hours lecture per week.

#### ENGL 207 LITERATURE OF THE EARLY AMERICAN REPUBLIC: COLONIZATION AND REVOLUTION, 1640-1830

Fall, 3 credit hours GER 7

This course is designed to acquaint students with the early emergence of a distinctively American literature. Students explore the roots of American literature and how the literature makes us that 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. Three hours lecture per week.

#### ENGL 208 AMERICAN LITERATURE COMES OF AGE: 1830-1920

Spring, 3 credit hours GER 7

This is a survey course which studies significant American authors from the pre-Civil War era and continues into the present. Students will study important American writers such as Whitman, Dickinson, Twain, Cather, Fitzgerald, Wright, Oates, Carver, and others. The historical, social, and political background for each period and the cultural changes and developments of the eras will also be examined. Three hours lecture per week.

#### ENGL 209 APPROACHES TO LITERATURE

Fall/Spring, 3 credit hours GER 7

This course is designed to acquaint students with different kinds of literature—plays, short stories, novels and poems—and with various methods of understanding literature. Students will read a wide

### Course Descriptions: ENGLISH

variety of literary works and will be encouraged to employ proper literary terminology in writing about them. Emphasis will be on intelligent interpretation and on the relationships between literary themes and everyday life. Three hours lecture per week.

#### ENGL 211 THE AMERICAN NOVEL OF THE TWENTIETH CENTURY

Fall/Spring, 3 credit hours GER 7

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 hours GER 7

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: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102). Three hours lecture per week.

## ENGL 214 CONTEMPORARY AMERICAN FICTION Fall/Spring, 3 credit hours GER

Through the writings of current authors, this course will examine literary trends and their relationship to social, political, cultural phenomena in America. Students will be given an opportunity—through their own writing and class discussion—to explore contemporary ideas, values, and attitudes expressed in the literature. Three hours lecture per week.

#### ENGL 215 MULTICULTURALISM IN AMERICAN LITERATURE

Spring, 3 credit hours GER 7

This course will examine multiculturalism in America 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/immigration status, religion, and family structure. Students should increase their understanding of the multicultural nature of our society and the existence of cultural traditions and practices that exist independently of those of the dominant American "mainstream" or overculture. Three hours lecture per week. Prerequisite: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) or permission of the instructor.

#### ENGL 216 CHILDREN'S LITERATURE

Fall/Spring, 3 credit hours GER 7

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. Three hours lecture per week. Prerequisite: Expository Writing (ENGL 101), or Oral and Written Expression (ENGL 102), or permission of the instructor.

#### ENGL 217 COMIC BOOKS AS LITERATURE

Fall/Spring, 3 credit hours GER 7 & GER 8

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. This course examines 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. Three hours lecture per week. Prerequisites include Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) AND one literature course or permission of instructor.

#### ENGL 218 SCIENCE FICTION WORKSHOP

Fall/Spring GER 7 & GER 8

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 will 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. Three hours lecture. Prerequisite: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) or permission of the instructor.

#### ENGL 219 THE ADIRONDACKS: LIFE AND LITERATURE

Fall/Spring, 3 credit hours

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. Three hours lecture per week.

#### ENGL 220 AMERICAN LITERATURE IN MODERN ERA 1920-PRESENT

Fall/Spring, 3 credit hours GER 7

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 developments of the eras are also examined. Three hours lecture per week. Prerequisites/corequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102)

#### ENGL 221 CREATIVE WRITING

Fall/Spring, 3 credit hours GER 8

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. This writing intensive course meets 3 hours per week. Pre-requisites include Expository Writing OR Oral and Written Expression and one literature course OR permission of the instructor.. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), and one literature course, or permission of instructor.

#### ENGL 224 SURVEY OF NATIVE AMERICAN LITERATURES

Fall/Spring, 3 credit hours GER 6

Introductory survey of expressive and essayist literature by selected Native American authors from the United States and Canada. Works will be 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. Three hours lecture per week. Prerequisite: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) or permission of instructor.

#### ENGL 225 AFRICAN AMERICAN LITERATURE

Fall/Spring, 3 credit hours GER 7

In this course, students will study African American authors from the Colonial Era up to the present. Topics to be covered include recurring themes and concerns, cultural pressures, historical contexts, intellectual currents and literary innovations. Students will study important African American writers such as Zora Neale Hurston, Richard Wright, Langston Hughes, Rita Dove, Toni Morrison, Alice Walker, and others. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) or permission of instructor.

### Course Descriptions: ENGLISH

#### **ENGL 264** LIVING WRITERS SERIES

Fall/Spring, 3 credit hours

GER 7

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 three genres. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL102) or permission of instructor.

#### **ENGL 265** WRITING IN THE HUMANITIES THEMATIC INQUIRY

Fall/Spring, 3 credit hours GER 7

This course will explore questions about the humanities and will introduce students to several disciplines within humanities. Through writing about a common theme, students will analyze, evaluate, and interpret texts, films, art and/or music that reflects this common theme. Citation and integration of external sources will be expected. This is a writing intensive course for students in Liberal Arts and Sciences: General Studies or for students interested in transferring to a liberal arts program, especially in the humanities. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); completion of 24 credits towards the major of General Studies; or permission of instructor.

#### **ENGL 266** THE MODERN ISLAMIC WORLD THROUGH FILM AND LITERATURE

Fall/Spring, 3 credit hours GER 6

This course will introduce the student to the history, cultures, and politics of the modern Islamic world with a special emphasis on film and literature. Readings will include poets such as Rumi and Hafiz as well as novelists such as Mahfouz and Farah. Films will include those of such Persian and Arab directors as Majidi, Kiarostami, and Chahine. Three lecture hours per week. PRE-REQUISITES/ CO-COURSES: Must have passed Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102).

#### **ENGL 301** PROFESSIONAL WRITING AND COMMUNICATION

Fall, 3 credit hours

This course aims to prepare students to work as communication professionals for the global marketplace. Emphasis is on technical writing, business writing, and publishing. Students will design and produce technical documents, including, but not limited to, memos, reports, instructions, presentations, and websites, responding to specific audiences and purposes in the business world. Students should

be familiar with desktop publishing and electronic presentations.. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) and jcompletion of at least 45 credit hours,; or permission of instructor.

#### **ENGL 305** PERPETRATORS & VICTIMS: CRIME AND VIOLENCE IN LITERATURE

Fall/Spring, 3 credit hours

In this course, through the study of various forms of literary expression, students will examine the impact of crime and violence in American culture. Analysis will focus on both perpetrators and victims of crime and violence, allowing students the opportunity to explore the influence of such happenings on their own lives and on the society we live in today. Particular sub-topics include true crime, the criminal mentality and youth, crime and individuals, and crime and society. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), 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 hours GER 7

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. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); completion of 45 credit hours with a minimum 2.0 GPA

#### **ENGL 309 JOURNALISM**

Fall/Spring, 3 credit hours

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.

### WRITING YOUR LIFE: FORM & **FUNCTION IN MEMOIRS**

GER 8 Fall/Spring, 3 credit hours

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 will study a variety of literary forms within the memoir genre, and they will create memoirs of different forms from their own life experiences. Students will recognize that both concrete details and abstract ideas in memoirs represent universal truths and will create poems and stories that reflect both. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

#### ENGL 315

#### SHORT FICTION: THE ART OF THE TALE Fall/Spring, 3 credit hours GER 8

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. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) OR Oral and Written Expression (ENGL 102) AND one literature course AND 30 credit hours earned with a cumulative GPA of 2.0 or permission of instructor.

#### ENGL 317 WORLD POETRY

Fall/Spring, 3 credit hours

GER 6

This course explores 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 world views, 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. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) OR Oral and Written Expression (ENGL 102), and one lower-level literature course, or permission of instructor.

#### **ENGL 320** NATIVE AMERICAN AUTOBIOGRAPHY Fall/Spring 3 credit hours

This course is a survey of the means by which Native American people have recorded their lives. Texts will be selected from pre-contact pictorial and oral auto-biographical narratives through contemporary written texts, film, and electronic media. Historical context will be provided in lecture. Emphasis is on works published since 1980. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) OR Oral and Written Expression (ENGL 102) AND one lower level literature course AND 30 credit hours earned OR permission of instructor.

## Course Descriptions: ENGLISH

#### **ENGL 325** CONTEMPORARY YOUNG ADULT LITERATURE

Fall/Spring, 3 credit hours

This course is an exploration of contemporary young adult novels as a genre of literature. Of particular interest will be the historical development, current trends, enduring characteristics, and its influence on readers. Various works will be analyzed according to critical perspectives, and particular themes of the 'new realism' of life and problems; the 'old romanticism' of wishing and winning; 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. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of instructor.

#### **ENGL 330** WOMEN IN LITERATURE

Fall/Spring, 3 credit hours

This course will examine women in literature through a variety of literary works and genres. Students may explore such themes as female archetypes and stereotypes; the cultural alienation of women of color; female identity in contemporary culture; or other themes pertinent to the female human experience. Students will enrich their understanding of literature and the roles and experiences of women in shaping such literature. Students may read from works and genres of literature as diverse as the Bible, Greek drama, The Canterbury Tales, Romantic and Victorian poetry, and the contemporary novel. Three hours lecture per week. Prerequisite: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), Introduction to Women's Studies (WMST 201) or one literature course or permission of instructor.

#### **ENGL 340** AMERICAN WOMEN WRITERS

Fall/Spring, 3 credit hours

This course is designed to acquaint students with significant American women writers, such as Wheatley, Bradstreet, Harper, Dickinson, Alcott, Gilman, Stowe, Yezierska, 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. Prerequisite: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) and completion of at least 45 credit hours, or permission of instructor.

**ENGL 350** FLASH FICTION

GER 8 Fall/Spring, 3 credit hours

The Flash Fiction story (also called short-shorts;

micro; sudden; or lightning fiction) lies somewhere between prose and poetry. Students taking this course will 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. Three lecture hours per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), one literature course, and 30 credit hours earned with a cumulative GPA of 2.0, or permission of the instructor. Creative Writing (ENGL 221) is strongly suggested as a prerequisite.

#### ENGL 291-295, 391-395 OR 491-495 SPECIAL TOPICS IN ENGLISH

Fall/Spring, 1-4 credit hours

Special Topics in English will fulfill the general English component of the distribution requirement of the College. It may be repeated for credit depending on the content of the course. It is not a course offered on a regular basis within the department. The intent of a special topics course is to offer an educational experience which is topical, not available within the regular curricular offerings, and may even be offered interdepartmentally depending on the nature of the course.

#### **ENGS 101** INTRODUCTION TO ENGINEERING Fall, 2 credit hours

This course will introduce students to the profession of engineering and the tools used to practice engineering. The student will explore the design process through various projects that will include a major design project. During these projects, students will learn about computer aided design, engineering analysis, sketching, critical thinking, ethical decision making, and how to work in a team environment. Students will develop skills in oral presentations and effective writing. Students are assessed through performance on projects, exams, quizzes, homework, and oral and written reports. Two, two-hour laboratories per week.

#### **ENGS 102** PROGRAMMING FOR ENGINEERS Spring, 2 credit hours

This course provides the software skills necessary to create predictive models and solve basic engineering problems. Students will learn to make statistical inferences about the data while creating graphical presentation of the results using engineering-related software. The skills taught in this course will assist in the analysis of engineering problems in more advanced course work. Two hours recitation in computer laboratory per week.

**ENGS 201** STATICS

Fall, 3 credit hours

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. Three hours lecture per week. Prerequisites: Calculus II (MATH 162), University Physics I (PHYS 131), or permission of instructor.

#### **ENGS 202 DYNAMICS**

Spring, 3 credit hours

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. Prerequisite: Statics (ENGS 201) or permission of instructor.

#### **ENGS 203** ENGINEERING STRENGTH OF **MATERIALS**

Spring, 3 credit hours

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 in order to use sound judgment regarding the design of structures and components. Three hours lecture per week. Prerequisite: Material Science (ENGS 205), Statics (ENGS 201), or permission of instructor.

#### **ENGS 205** MATERIALS SCIENCE

Fall, 3 credit hours

The underlying atomic and crystalline structure of materials is studied and how these structures affect their engineering properties. The mechanical, electric, chemical, magnetic and thermal properties of metals, ceramics, polymers and composites are examined. Three hours lecture per week. Prerequisite: College Chemistry I (CHEM 150), Calculus II (MATH 162), and University Physics II (PHYS 132), or permission of instructor.

#### ENGS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ENGINEERING SCIENCE

Fall/Spring, 1-4 credit hours

Special Topics in Engineering Science will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

## INTRODUCTION TO ENVIRONMENTAL **SCIENCE**

Fall/Spring, 3 credit hours 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: Beginning Algebra (MATH 100); Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); or an 80 on the NYS ELA Examination; or permission of instructor.

#### ESCI 102 INTRODUCTION TO ENVIRONMENTAL SCIENCE LABORATORY

Fall/Spring, 1 credit hour

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 laboratory per week. Prerequisites: Beginning Algebra (MATH 100); Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); or permission of instructor. Corequisite: Introduction to Environmental Science (ESCI 101) or permission of instructor. Recommended math level-Intermediate Algebra (MATH 106). If the student is also enrolled in ESCI 101 and withdraws from ESCI 101 prior to the last day to withdraw, withdrawing from this course is also required.

#### ESCI 105-LECTURE ESCI 106-LAB ENERGY RESOURCES

Spring, 3-4 credit hours

GER 2

This course examines the physical, economic, and political interactions of the following energy resources: fossil fuel, nuclear power, biomass and solar energy. Three hours lecture per week. If lab is elected, an additional two hours laboratory per week is required. Recommended prerequisite: students have high school algebra or equivalent.

#### ESCI 107 EARTH SCIENCE

Fall/Spring, 4 credit hours GER 2

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. Three hours lecture, two hours laboratory per week. Students cannot receive credit for both ESCI 107 and GEOL 101.

#### ESCI 110 INTRODUCTION TO METEOROLOGY Fall/Spring, 3 credit hours

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. Three hours lecture per week.

#### ESCI 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN ENVIRONMENTAL SCIENCE

Fall/Spring, 1-4 credit hours

Special Topics in Environmental Science will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

#### ESOL 096 ACADEMIC COMMUNICATION

Fall/Spring, 4 credit hours

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. Four hours lecture per week. This course is an alternate to Introduction to Academic Reading and (ENGL 097) or Basic Writing (ENGL 098) for ESL students. Leveled by placement test score.

#### FREN 101 CONTEMPORY FRENCH I

Fall, 4 credit hours 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. Four hours lecture per week. 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

#### FSAD 111 STUDY OF FUNERALS, PAST, PRESENT AND FUTURE

Fall, 3 credit hours

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 through the entire funeral process are extensively covered. Historical methods of preservation and memorialization, both religious and secular, as well as modern funeral customs of select societies around the world are examined. Protocol and procedures for funerals of active duty military are specifically addressed as is mass casualty incident response by funeral directors as established by D-MORT. Exploration of personal attitudes and responses to death is included as a means of developing an appreciation for the emotional features of this profession. Three hours lecture per week.

#### FSAD 121 ANALYTICAL EMBALMING TECHNIQUES Spring, 4 credit hours

This is the first of three embalming courses. Topics included are Public Health considerations, ethical performance, use and design of embalming instruments, and the chemical theories of preservation and decomposition. A final grade of "C" or better is required to continue in the program. Three hours lecture, three hours laboratory per week. Prerequisite: matriculation in the program

#### FSAD 129 CLINICAL PRACTICUM 2 credit hours

Students are required to work in a selected funeral home for a period of five weeks. During this period, students relate the theoretical background they have acquired to the practical functions of a funeral director. Faculty maintains contact with the student and the funeral director during the practicum by personal visits and/or phone conversations. This is an unpaid position. Prerequisite: successful completion of one semester of embalming or permission of instructor.

#### FSAD 211 EMBALMING AND ASEPTIC TECHNIQUES

Spring, 4 credit hours

Subsequent to Analytical Embalming Techniques (FSAD 121), this course focuses on unique and special problems encountered by the embalmer in professional practice. Microbiology of pathogens and techniques of infection control are a major aspect. Three hours lecture, three hours laboratory per week. Final grade of "C" or better is required to continue in the program. Prerequisite: matriculation in the program or permission of instructor.

#### FSAD 214 FUNERAL HOME MANAGEMENT I

Spring, 3 credit hours

The study of management techniques and procedures that is necessary for successful operation of a funeral home as a specific type of small business. Three hours lecture per week.

#### **FSAD 225**

# PROFESSIONAL FUNERAL PRACTICE Fall, 3 credit hours

This course is a study of business laws pertaining to funeral home operation with special attention given to the Federal Trade Commission Funeral Rules and regulations. Funeral home merchandising with emphasis on casket and vault construction is a major component. Proper professional practices based on the codes of ethics of funeral associations are discussed and evaluated. Three hours lecture per week. Prerequisite: Introduction to Information Technology (CITA 110), Study of Funerals, Past, Present, and Future (FSAD 111).

#### FSAD 307 HUMAN RESPONSE TO DEATH Spring, 4 credit hours

This writing intensive course is a survey of the psychological, philosophical, and sociological components of human loss and grief. The understanding of bereavement is central to the development of communication and counseling skills. Laboratory exercises include arranging and conducting and participating in mock funerals. Three hours lecture, two hours laboratory per week. Prerequisite: Death, Dying and Bereavement (SSCI 315), and Professional Funeral Practice (FSAD 225), or permission of instructor.

#### FSAD 308 INTRODUCTION TO INTERNSHIP Fall/Spring, 1 credit hours

An internship is required to complete degree requirements in Funeral Services Administration. This course is taken in a semester prior to the Internship. Students locate a suitable site, construct a memorandum of understanding with a preceptor at that site, and create a learning contract. A liability insurance binder through the college must be established. Goals and objectives, a grading rubric, and communication methods for the experience are determined cooperatively by student, preceptor, and faculty supervisor. One hour per week. Prerequisite: Completion of 75 credit hours toward graduation including Clinical Practicum (FSAD 129), or permission of instructor.

#### FSAD 321 ADVANCED EMBALMING PRACTICE Spring, 4 credit hours

Designed to improve the skills and knowledge base of students and practicing licensed personnel, this course focuses on the less common techniques applied in unusual situations. Waterless embalming, regional freezing procedures, mummification, alternative machinery, and special purpose chemicals will be explored. Unique embalming situations are addressed such as long-term storage, entombment vs. burial, decomposed bodies, stillbirths, religious limitations, anatomical embalming, and fragment treatment in anticipation of delayed final disposition. Perfection of techniques of sterile procedure, terminal disinfection, and personal protection is expected. Three hours lecture, three hours laboratory per week. Prerequisites: Analytical Embalming

Techniques (FSAD 121), Embalming and Aseptic Techniques (FSAD 211), or current embalmer's license, or permission of instructor.

#### FSAD 322 FUNERAL HOME MANAGEMENT II Fall, 3 credit hours

This course addresses the practical problems facing funeral managers in contemporary society. Marketing strategies, pricing methods, creative personnel management, alternative memorial activities, prearrangement sales, financial assessment techniques, aftercare, transition planning, expansion of facilities, and establishment of consortia of funeral homes. Recruitment and training of non licensed staff, compliance methods, salary incentives, and record keeping which meet legal requirements are included as well. Three hours lecture per week. Prerequisites: Funeral Home Management (FSAD 214), Business Organization and Management (BSAD 100) or permission of instructor.

#### FSAD 323 RESTORATIVE ART

Spring, 4 credit hours

This course familiarizes the student with instruments, materials, and development of techniques for restoring the dead human body damaged as a result of disease and trauma. The course also explains the technique for the proper application of cosmetics. Three hours lecture, two hours laboratory per week. Prerequisite: Human Anatomy and Physiology I (BIOL 207), Study of Funerals (FSAD 211), or permission of instructor.

#### FSAD 401 FUNERAL SERVICE LAW

Spring, 3 credit hours

This course deals with laws directly related to funeral service including solicitation of clients, rights of possession, cemeteries, interstate agreements, international shipping, funding vehicles, association rights, lobbying, local ordinances, and employer/employee relationships. General Business Law concepts are also covered. Three hours lecture per week. Prerequisite: majors only or permission of instructor.

#### FSAD 406 BEREAVEMENT COUNSELING

Spring, 3 credit hours

Building upon the rudimentary counseling skills developed in FSAD 307 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 makes this a useful approach to delivery of human services. Anticipatory grief, hospice, 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. Three hours lecture per week. Prerequisite: Human Response to Death (FSAD 307) or permission of instructor.

#### FSAD 420 CURRENT ISSUES IN FUNERAL SERVICE

Fall, 3 credit hours 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 will include: public health, government regulation, funeral home management, religious and secular rites and rituals. Major focus will be 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 will be utilized as a predictive tool in assessing society's new outlook on loss and recovery. Three hours lecture per week. Prerequisites: minimum junior level status or permission of instructor. This is a writing intensive course.

#### FSAD 440 INTERNSHIP IN FUNERAL SERVICES ADMINISTRATION

Fall/Spring, 8 credit hours

Students will spend at least 40 hours per week for eight weeks in this experiential course. They will perform the standard duties of Funeral Director trainees in the areas 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: Introduction to Internship (FSAD 308) or permission of instructor.

#### FSAD 445 MORTUARY COMPLIANCE Fall/Spring, 2 credit hours

This course is taken during the last semester of the Mortuary Science curriculum, this ensures compliance with all Health Department regulations, and federal and state laws pertaining to funeral directing in a state where the student intends to practice. These topics are exhaustively clarified and validated through extensive and focused specialized testing including the National Board Examination. Students must take the NBE to pass this course. This is an online course that requires the student to purchase a review manual & MATS testing simulator. Prerequisites: Human Response to Death (FSAD 307), Funeral Service Law (FSAD 401), or permission of instructor.

#### FSMA 201 INTRODUCTION TO FINANCIAL PLANNING

Fall semester, 3 credit hours

This course will cover the personal financial planning process, regulatory and ethical considerations in personal financial planning, time value of money problems, an overview of retirement planning, housing Issues, and proper ways of purchasing major durable goods. Three hours lecture per week. Prerequisites: Foundations of Financial Accounting (ACCT 101), Microeconomics (ECON 103), or permission of instructor.

## Course Descriptions: FINANCE

#### FSMA 210 INTRODUCTION TO FINANCE

Fall/Spring, 3 credit hours

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: Introduction to Information Technology (CITA 110), GER Math OR Foundations of Financial Accounting (ACCT 101), or permission of instructor.

#### FSMA 301 PERSONAL FINANCE Fall/Spring, 3 credit hours

This course will provide broad coverage of personal financial decisions. Topics covered includes basic financial planning, tax issues, managing savings and other liquid accounts, credit management, insurance, managing investments and retirement planning. Knowledge of financial products, analytical tools, and economic analysis will be cultivated in the context of setting personal financial goals and measuring progress. Three lecture hours per week. Prerequisites: Junior level status in Financial Services or permission of instructor.

#### FSMA 312 FINANCIAL MANAGEMENT Spring, 3 credit hours

This course is a continuation of Introduction to Finance (FSMA 210). 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. Three hours lecture per week. Prerequisite: A minimum grade of C in Introduction to Finance (FSMA 210) is required or permission of instructor.

#### FSMA 315 GLOBAL INVESTMENT Fall. 3 credit hours

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, from both a theoretical perspective and the perspective of investment managers. Special attention is given to application of the basic concepts to the three major capital markets: stock, bond and financial derivatives markets. Three lecture hours per week. Prerequisites: Foundations of Financial Accounting (ACCT 101), Business Law I (BSAD 201), and Principles of Macroeconomics (ECON 101), or permission of instructor.

FSMA 320 INVESTMENT ANALYSIS AND PORTFOLIO THEORY

Fall/Spring, 3 credit hours

The course provides a foundation for selecting

financial assets and form sound investment decisions. Lectures cover both traditional and modern approaches to security selection, investment analysis and portfolio management, with emphasis on investment strategy and investment performance evaluation. The major topics to be covered will 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. Three lecture hours per week. Prerequisites: Financial calculator, Introduction to Finance (FSMA 210) or permission of instructor.

#### FSMA 325 FINANCIAL COMPLIANCE AND REGULATION

Fall, 3 credit hours

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 instructor.

#### FSMA 330/ECON 330 FINANCIAL MARKETS AND INSTITUTIONS

Fall/Spring, 3 credits

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, and pension funds. In addition, it provides a comprehensive introduction to risk management within the framework of financial services industry. Three hours lecture per week. Prerequisites: Principles of Macroeconomics (ECON 101) or Principles of Microeconomics (ECON 103), and a minimum 45 credit hours, or permission of instructor.

## FSMA 415 GLOBAL FINANCE

Spring, 3 credit hours

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 international income, and international mergers and acquisitions. Three hours lecture per week. Prerequisites: Global Investments (FSMA 315) or permission of instructor.

#### FSMA 420 FINANCIAL DERIVATIVES Spring, 3 credits

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 Finance or permission of instructor.

#### FSMA 422 RISK MANAGEMENT

Fall, 3 credit hours

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 will be examined. Three hours lecture per week. Prerequisite: Financial Derivatives (FSMA 420) or permission of instructor.

#### FSMA 429 ORIENTATION TO CULMINATING EXPERIENCE

Spring, 1 credit hour

This course is intended as the precursor to the Senior Culminating Experience in the Finance, BBA program. Seniors will meet with faculty on a weekly basis to discuss resumé preparation, job interviewing techniques, identifying and securing internships and internship requirements. This course is a prerequisite to Finance Internship (FSMA 480). Fifteen lecture hours to include: lecture, discussion, internship preparation and review. Prerequisite: senior level status in Finance program.

#### FSMA 460 SENIOR PROJECT Fall/Spring, 3-15 credit hours

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 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. 37.5 project hours per credit hour. Prerequisites/corequisites: Introduction to Culminating Experience (FSMA 429) and senior level status in the Finance program or permission of instructor.

#### FSMA 480 FINANCE INTERNSHIP

Fall/Spring, 6-15 credit hours

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 will perform prescribed work within an administrative setting. The internship will be 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 Finance program, or permission of instructor.

#### FSMA 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN FINANCE

Fall/Spring, 1-4 credit hours

Special Topics in Finance will generally include topics of interest or topics not covered in courses offered by the department or in combinations not currently available.

#### FYEP 101 FIRST YEAR EXPERIENCE

Fall/Spring, 1 credit hour

This course is designed to introduce, acclimate and connect students to the college campus. Indepth discussions, specialized topics and a final presentation tied to a common First Year Experience theme will assist students in formulating professional goals and achieving academic success. One hour of lecture per week.

#### GEOG 101 INTRODUCTION TO GEOGRAPHY

Spring, 3 credit hours

GER 3

This course provides a survey of two major themes in geography—the physical landscape and the distribution and interrelationships of human activities over the globe. Special emphasis is given to developing a geographical perspective to address economic, population and social problems at local, regional and global levels. Three lecture hours per week. Social Science elective.

#### GEOL 101 PHYSICAL GEOLOGY

Fall/Spring, 3 credit hours GER 2

This course includes a general look at the earth including its composition and structure on a large scale. The processes which cause changes in and on the earth will also be studied. Topics will include: the study of minerals and rocks, the origin and type of rocks, the rock cycle and the identification of many of the common rocks and minerals. Other major topics include: geologic time, weathering, erosion, glaciers, running water, volcanoes, earthquakes and plate tectonics. Three hours lecture per week.

#### GEOL 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN GEOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Geology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

# GMMD 101 INTRODUCTION TO MEDIA STUDIES Fall/Spring, 3 credit hours GE

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. Three hours lecture per week.

#### GMMD 102 INTRODUCTION TO DESIGN

Fall/Spring, 3 credit hours 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. Three hours lecture per week.

#### GMMD 103 INTRODUCTION TO DIGITAL DESIGN SOFTWARE: PHOTOSHOP BASICS

Fall/spring, 3 credit hours

In GMMD 103 students learn how to use the industry standard software Adobe Photoshop to create/edit digital imagery and enhance digital photographs. Photoshop is explained through the teaching of its tools and the underlying principles that govern them. Along with providing an overview of the software this course serves as a starting point in understanding the Adobe software collection suite and its role in the design industry. Two hours lecture, two hours laboratory per week.

#### GMMD 201 DIGITAL PHOTOGRAPHY

Fall, 3 credit hours GER 8

Students will develop competency in digital image capture, processing, and critical evaluation. Hands-on activities and studio/lab will permit each student to investigate the applications of applied digital and hybrid photography. Through technical studio assignments, critiques, and presentations, students will increase their skills in image printing, camera operation and using computer imaging software. Students will also develop critical awareness of composition and the relationship of digital photography to other media. Three hours lecture per week.

#### GMMD 211 FILM ANALYSIS

Fall/Spring, 3 credit hours

GER 8

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 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. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) or permission of instructor.

### GMMD 240 PROFESSIONAL PRACTICES

Fall/Sspring, 3 credit hours

Professional Practice is an experiential survey of various design professionals and their working environments. Students will leave the classroom and attend several lectures and professional visits, experiencing first hand the work flow, professional practices and client interaction of designers in their workplaces. Students will complete several assignments based on their research and first hand experience with several design careers, including the preliminary work in arranging for their GMMD internship. Three hours lecture per week. Prerequisite: GMMD Major, 45 credits with a 3.0 GPA, or 60 credits with a 2.5, or permission of the instructor.

#### GMMD 301 3-D DESIGN

Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite: Introduction to Design (GMMD 102).

#### GMMD 302 DIGITAL PHOTOJOURNALISM Fall/Spring, 3 credit hours

Building upon the introductory skills of GMMD 201, this course explores the use of the digital photographic image in narrative, documentary, and editorial form. The classroom lectures will emphasize the act of photographing and the

## Course Descriptions: GEOLOGY, GRAPHIC & MULTIMEDIA

process and history of photojournalism. Through practical assignments, students will develop their skills and awareness in on-location photography, constructing and presenting visual narratives, and the ethics and issues of photojournalism. Particular emphasis will be placed on the mature exploration of contemporary themes, the recognition and application of appropriate narrative voice in projects, and the increased awareness of ethical and technical issues and responsibilities in photojournalism. Three hours lecture per week. Prerequisites: Digital Photography (GMMD 201) and Introduction to Design (GMMD 102), or permission of instructor.

#### GMMD 303 EXPERIMENTAL DIGITAL PHOTOGRAPHY

Spring, 3 credit hours

This course builds sequentially on the introductory skills developed in GMMD 201. Through lectures, tutorials, and hands-on laboratory exercises, students will expand their capabilities in digital image capture, processing, printing and presentation. Experimental techniques and approaches in digital imaging will be emphasized. In addition to broadening technical and conceptual capabilities, through research and laboratory projects students will achieve a more sophisticated understanding of contemporary digital media and begin to locate their work in relation to contemporary fine arts and media. Three hours lecture per week. Prerequisites: Introduction Design (GMMD 102) and Digital Photography (GMMD 201), or permission of instructor.

#### GMMD 313 STUDIES IN GENRE FILM

Fall/Spring, 3 credit hours GER 8

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 on 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 and Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); Intro to Media Studies (GMMD 101) and at least 30 credit hours or permission of the instructor.

#### **GMMD 330**

the instructor.

# WEB DESIGN AND DEVELOPMENT Fall/Spring, 3 credit hours

Students will be introduced to basic code, web development strategies, and current industry standards. Students will learn how to create and edit HTML and CSS with web authoring tools. Special emphasis will be placed on file management and image design. The course will culminate in a final project utilizing the design process. Three hours lecture per week. Prerequisites: Introduction to Design (GMMD 102), Introduction to Programming (CITA 180) or equivalent, or permission of

#### GMMD 331 DIGITAL ILLUSTRATION AND TYPOGRAPHY

Fall/Spring, 3 credit hours

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. Two hours lecture, two hours studio per week. Prerequisites: Introduction to Design (GMMD 102), Digital Photography (GMMD 201), or permission of the instructor.

#### GMMD 401 MULTIMEDIA PRODUCT DESIGN Fall, 3 credit hours

This course will provide for an experimental and experiential approach to integrating content with new media techniques and processes. Students will use computers as creative tools to explore narrative, immersion, virtuality, visuality, and networked public sphere. Students will also develop planning and organizing skills for experimental interactivity and imaging projects. Three hours lecture per week. Prerequisites: Visual Programming and Development Tools (CITA 342), and Digital Photojournalism (GMMD 302), and senior level status, or permission of instructor.

#### GMMD 409 ISSUES IN NEW MEDIA JOURNALISM Fall/Spring, 3 credit hours

This course explores the politics of new media entering the world of traditional print and broadcast journalism. Students are asked to consider whether non-centralized forms represent a new democratization of publishing or whether they erode the possibility of objective journalism. Emphasis is placed on situating these new forms within a history of journalism from its 17<sup>th</sup> century beginnings through the new journalism of the sixties and into the present implications of reporting through social networks. Three hours lecture per week. Prerequisites: Professional Communication (ENGL 301), and Journalism (GMMD 309), and senior level status, or permission of instructor.

#### GMMD 411 DIGITAL DOCUMENTARY VIDEO Fall/Spring, 3 credit hours

This course builds upon the technical, compositional and production techniques learned in

GMMD 201 and GMMD 102. Through project-based studio production, this course will explore 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. Through lectures, critiques, research and studio exercises, students will explore the creative process of interpreting, representing, and affecting the sociological and environmental relationships of this age by means of the moving image. Three hours lecture per week. Prerequisite: Digital Photography (GMMD 201) and Introduction to Design (GMMD 102), or permission of instructor.

#### GMMD 412 EXPERIMENTAL DIGITAL VIDEO Fall/Spring, 3 credit hours

This course builds upon the technical, compositional and production techniques learned in GMMD 301 and GMMD 102. Through tutorials, studio assignments, critiques, and research, students will utilize advanced techniques and conceptual approaches to produce and critique several digital video works. Students will combine the elements of performance, scripting, sound, computer graphics, and video techniques, as well as have in-group discussions about student- and professional-produced films. Three hours lecture per week. Prerequisites: Digital Photography (GMMD 201) and Introduction to Design (GMMD 102), or permission of instructor.

#### GMMD 420 ANIMATION TECHNIQUES Fall/Spring, 3 credit hours

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 computergenerated 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. Three hours lecture per week. Prerequisites: Digital Illustration and Typography (GMMD 331), Experimental Digital Video (GMMD 412), Experimental Digital Photography (GMMD 303), or permission of the instructor.

#### GMMD 432 VIRTUAL WORLDS Spring, 3 credit hours

This course examines gaming concepts, non-linear narrative, delivery systems and software for the entertainment industry. 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. Three lecture hours per week. Prerequisites: Visual Programming and Development Tools (CITA 342), Classical Theater (ENGL 393) or Contemporary Theater (ENGL 394), Creative Writing (ENGL 221) or Short Fiction (ENGL 315) and senior level status, or permission of instructor.

## Course Descriptions: GRAPHIC & MULTIMEDIA DESIGN

#### GMMD 440 ORIENTATION TO CULMINATING EXPERIENCE IN GMMD

Fall, 1 credit hour

This course will focus on allowing the student to create a proposal for either a combination of group and individual culminating projects or for a culminating internship. One hour lecture per week. Prerequisites: Senior level status and successful completion of all previous New Media work, or permission of instructor.

#### GMMD 443 ARTS MANAGEMENT INTERNSHIP Fall and/or Spring, 3-4 credits

Students focus on the challenges of negotiation, public relations, and management. Students will 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 su-pervisor, 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. 40 hours of internship work per credit hour. Prerequisites: GMMD 440: Orienta-tion to Culminating Experience in GMMD Co-course, GMMD 442 Graphic and Multimedia Design Individual Project or GMMD 443 Arts Management Internship or permission of instructor.

#### GMMD 444 MULTIMEDIA PRODUCT DESIGN II Spring, 4 credits

This course is a capstone experience course in the Graphic and Multimedia Design program, allowing stu-dents to develop skills in group communication and teamwork as they plan, design, develop, produce, pre-sent, 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 GMMD401; culminating in a public presentation of student works and an exit portfolio for graduation. Three lecture hours per week. Pre-requisites: GMMD401 Multimedia Product Design, or permission of instructor.

#### GMMD 291-295; 391-395; 491-495 SPECIAL TOPICS IN GMMD

Fall/Spring, 1-4 credits

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in Graphic and Multimedia Design.

#### HEFI 201 HEALTH & WELLNESS PROMOTION Fall/Spring, 3 credit hours

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, will be covered. Students will discuss current literature related to these topics and develop a promotion/wellness intervention project based on an area of their choice. Three hours lecture per week. Prerequisite: junior level status or permission of instructor.

#### HEFI 202 HEALTH AND WELLNESS ACROSS THE LIFESPAN

Fall/Spring, 3 credit hours

Students will 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 will be identified and discussed. Students will formulate strategies to promote healthy lifestyles and advocate for positive changes in health policy for individuals and communities. Three hours lecture per week. Prerequisite: Health and Wellness Promotion (HEFI 301) or permission of instructor.

## HEFI 203 MOTOR DEVELOPMENT

Spring, 3 credit hours

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. Prerequisite: Health and Wellness Promotion (HEFI 201) or permission of instructor. Corequisite: Health and Wellness Across the Lifespan (HEFI 202) or permission of instructor.

#### HEFI 303 EXERCISE PHYSIOLOGY

Fall/Spring, 3 credit hours

Students will 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 will be covered in detail and adaptations of these systems to exercise will be discussed. Environmental and hormonal influences will also be included. Students will explore specific aspects of training for sports performance. Three hours lecture per week. Prerequisite: 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 hours

This course is designed to further assess and reinforce the skills necessary for injury recognition, assessment, prevention, management, and treatment of athletic injuries. In the lab setting students will learn the theory behind tape and the proper application of athletic bandaging and wrapping. Two hours lecture, one hour laborator per week. Prerequisite: 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/PSYC 320 PSYCHOLOGY OF HEALTH AND FITNESS Fall/Spring, 3 credit hours

This course will examine 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 will be discussed. The concept of Positive Psychology, a strength-based, preventive approach to personal and community research and interventions will be an integral part of the course. Three hours lecture per week. Prerequisite: Human Development (PSYC 225), junior level status, or permission of instructor.

#### HEFI/SSCI 370 RESEARCH METHODS IN SOCIAL AND HEALTH SCIENCES

Fall/Spring, 3 credit hours

This course provides an intense comprehensive study of the scientific research process utilized in the social and health sciences. Students will be trained to be critical consumers of published research and will be expected to complete a research project. Topics that will be covered include the underlying theory of research; and data management and presentation. Three hours lecture per week. Prerequisite: Introduction to Psychology (PSYC 101), or Introduction to Sociology (SOCI 101), or Introduction to Science and Technology of Behavior (SSCI 245), or Principles of Macroeconomics (ECON 101), or Principles of Microeconomics (ECON 103); Statistics (MATH 141) or equivalent course work, and Expository writing (ENGL 101) or Oral and Written Expression (ENGL 102), or permission of the instructor. Additionally, students must have at least junior level status or permission of the instructor.

#### HEFI 375 FITNESS AND SPORTS NUTRITION Fall/Spring, 3 credit hours

This course will provide students with an understanding of the link between nutrition and exercise. Specifically, students will examine the unique demands of exercise training for athletes at all levels and the impact of nutrition on performance. Students will integrate their knowledge of exercise physiology and sports nutrition to create a dietary plan that enhances athletic performance. Three hours lecture per week. Prerequisite: Exercise Physiology (HEFI 303) or permission of instructor.

## Course Descriptions: HEALTH AND FITNESS

#### HEFI 401 FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION

Fall/Spring, 4 credit hours

Students will acquire the knowledge and skills to assess the physical fitness of apparently healthy individuals. Focus will be on the four components of physical fitness: cardiorespiratory fitness, muscular fitness, body composition, and flexibility. Handson training in assessment and exercise prescription for these four components will be included during laboratory sessions. Three hours lecture, two hours laboratory per week. Prerequisite: Health and Wellness Across the Lifespan (HEFI 202), Exercise Physiology (HEFI 303), or permission of instructor.

#### HEFI 402 STRENGTH AND CONDITIONING Fall/Spring, 3 credit hours

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 will be included, along with specialized topics such as bioenergetics, endocrine response to resistance exercise, and use of performance-enhancing substances. Both aerobic and anaerobic exercise prescription for the athlete will be included. This course provides specific preparation for the student who wants to pursue certification as a strength and conditioning specialist (CSCS) through the NSCA. Three hours lecture per week. Prerequisite: Exercise Physiology (HEFI 303); Corequisite: Fitness Assessment and Exercise Prescription (HEFI 401); or permission of instructor.

#### HEFI 403 COMMUNITY WELLNESS

Fall/Spring, 3 credit hours

This course will introduce students to the benefits of establishing health promotion programs in community settings. Students will be 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 will guide the assessment and planning process. Three hours lecture per week. Prerequisite: Health and Wellness Across the Lifespan (HEFI 302); Corequisite: Fitness Assessment and Exercise Prescription (HEFI 401); or permission of instructor.

#### HEFI 404 LEGAL ASPECTS AND DOCUMENTATION IN HEALTH AND FITNESS PROFESSIONS

Fall 3 credit hour

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 Prerequisite: Health and Wellness Promotion (HEFI 201), Health and Wellness Across the Lifespan (HEFI 202), Motor Development (HEFI 203).

#### HEFI 405 CURRENT ISSUES IN HEALTH AND FITNESS

Spring, 3 credit hours

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 international level and formulate their own thoughts and conclusions regarding these topics. Three hours lecture per week. Prerequisite: Senior level status in HEFI program or permission of instructor.

#### HEFI 406 ORIENTATION TO INTERNSHIP Fall/Spring, 1 credit hour

This course is a pre-requisite course that will prepare students for HEFI 407. The instructor will discuss best practices in searching for internship opportunities as well as the fundamentals for developing an internship contract that meets SUNY Canton guidelines. Students will be expected to submit an internship proposal which will include anticipated goals and objectives for the internship, as well as a timeline for completion. Students will also be provided guidance in documenting daily reflections and activities in a journal as well as tips for building a professional portfolio. One hour lecture per week. Prerequisite: Senior level status in HEFI program or permission of instructor.

#### HEFI 407 HEALTH AND FITNESS PROMOTION INTERNSHIP

Fall/Spring, 3-9 credit hours

This internship course provides the student with 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. Prerequisite: HEFI 406 and senior level status in HEFI program or permission of instructor.

#### HEFI 408 EXERCISE PRESCRIPTION FOR SPECIAL POPULATIONS

Spring, 4 credit hours

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. Prerequisite: Fitness Assessment and Exercise Prescription (HEFI 401), Strength and Conditioning (HEFI 402).

# HIST 101 HISTORY OF THE WESTERN HERITAGE Fall, 3 credit hours GER

This is a basic survey course in European history from early civilizations to approximately 1550 A.D. The focus is on the values, traditions, and changes that have characterized and determined Western culture, political institutions, social structures, and economic systems. Among the topics to be studied are: the Classical civilizations of Greece and Rome, Christianity, Islam, the Middle Ages, the Renaissance, and the Protestant Reformation. Three hours lecture per week.

#### HIST 102 MODERN EUROPE

Spring, 3 credit hours GER 5

A study of European history from the Reformation to the present. The focus is on several areas of historical change which have transformed Europe: culture (the Enlightenment, romanticism, contemporary European thought), politics (absolutism, power politics, and imperialism, ideologies liberalism, nationalism, socialism, and fascism), society and the economy (urbanization, industrialization, and the development of a global economy). Three hours lecture per week.

#### HIST 103 EARLY AMERICAN HISTORY

Fall/Spring, 3 credits GER 4

This course deals with the leading aspects of American history from discovery through the end of the Civil War. 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. Three hours lecture per week.

#### HIST 105 MODERN U.S. HISTORY

Spring, 3 credit hours

GER 4

This course deals with the leading aspects of American history from the Civil War to the present. 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 context. Three hours lecture per week.

## Course Descriptions: HEALTH AND FITNESS, HISTORY

#### **HIST 204**

# U.S. IMMIGRATION HISTORY THROUGH RACE, CLASS, AND GENDER

Fall/Spring, 3 credit hours GER

This course examines the history of immigration to the United States from the mid-19th century through the 20th century. The main themes of the course will include issues of race, class, 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. Three hours lecture per week. Prerequisites/corequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); and Early American History (HIST 103), or Modern United States History (HIST 105), or Introduction to Women's Studies (WMST 201); or permission of the instructor.

#### HIST 205 BASEBALL IN AMERICAN SOCIETY Fall/Spring, 3 credit hours

This course examines the historical impact that baseball has had on economic, social and cultural issues in America, particularly in the twentieth century. The main themes include issues of race, class, gender, labor, and immigration and how they factor into the progression of American society. Particular topics include, but are not limited to, the Negro Leagues, Latino and Japanese participation, women, and free-agency. Three hours lecture per week. Prerequisites/corequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), and Modern U.S. History (HIST 105), or permission of instructor.

#### HIST 217 WORLD HISTORY, FROM 1300 TO THE PRESENT

Fall/Spring, 3 credit hours GER 6

Using a global perspective, this course will consider how different peoples and civilizations interacted, or failed to, in the last 700 years. Some of the themes that will be emphasized and examined are the roles that conquest, trade, diffusion of ideas and technology played in bringing different parts of the world together. Three hours lecture per week.

#### HIST 303 COLONIAL AMERICAN HISTORY Spring, 3 credit hours

This course explores 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. Three hours lecture per week. Prerequisites: Early American History (HIST 103) and Expository Writing (ENGL 101) or Oral & Written Expression (ENGL 102) or permission of instructor.

#### HIST 304

## UNITED STATES WOMEN'S HISTORY

Fall/Spring, 3 credit hours GER 4

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. Three hours lecture per week. Prerequisites: 30 credit hours, Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), and a 2.50 cumulative GPA, or permission of instructor.

#### HIST 305 HISTORY OF THE VIETNAM WAR

Fall/Spring, 3 credit hours GER 4

This course provides an in-depth examination of the 20th century conflict in Vietnam through the lens of American involvement and interaction. Ideological, political, social, and economic contexts will be utilized as the events of the war are analyzed 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 also be scrutinized. Three hours lecture per week. Prerequisite: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); and Modern United States History (HIST 105) or World History (HIST 217); or permission of the instructor.

#### HIST 307 AMERICAN THOUGHT SINCE 1865

Fall/Spring, 3 credit hours GER 4

This course is a survey of 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 of the post-Civil War era including democracy, feminism, civil rights, anticommunism and capitalism. Three lecture hours per week. Prerequisite: Modern U.S. History (HIST 105) or permission of instructor.

#### HIST 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN HISTORY

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in history.

#### **HLTH 103**

# HEALTH: CURRENT PERSPECTIVES AND PRACTICAL APPLICATIONS

Fall, 3 credit hours

This general elective course is designed as an introductory health education course. The course provides opportunity for students to explore healthy life styles as well as learn about major health problems in the United States. The 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 hours 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. Three hours lecture per week.

#### HLTH 105 PATHOLOGY

Fall, 3 credit hours

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 hours

This is a introductory course, which surveys the 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 hours

The course is designed for students interested in health. The major emphasis is reportable communicable diseases. Students learn 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, bloodborne, and sexually transmitted. Three hours lecture per week.

#### HLTH 175 BASIC NUTRITION Spring, 3 credit hours

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. Three hours of lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), or permission of instructor.

#### HLTH 200

## MEDICAL TERMINOLOGY OF DISEASE

Fall/Spring, 3 credit hours

Medical terminology will be presented from a disease viewpoint. Diseases will include a crosssection of several different areas such as skin, respiratory, blood, and neonatal. Three hours lecture per week.

## Course Descriptions: HEALTH-RELATED, HEALTH CARE MANAGEMENT

#### **HLTH 212**

# HAPPINESS, HEALTH AND WELLBEING Fall/Spring, 3 credit hours

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. Three hours lecture per week.

#### HLTH 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN HEALTH

#### Fall/Spring, 1-4 credit hours

Special Topics in Health will include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

#### HSMB 101 INTRODUCTION TO HEALTH SERVICES MANAGEMENT

Fall, 3 credit hours

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 describes the fundamentals of health care system components, health care administrative functions, and health care management principles. Throughout the course, the instructor will work with students to develop their research, analytical, and communication skills in the health services management field. Three hours lecture per week.

#### HSMB 200 MEDICAL TERMINOLOGY & CODING CLASSIFICATION SYSTEMS

#### Fall/Spring, 3 credit hours

This course provides the student with an opportunity to learn the language of medical terminology and how it correlates with United States coding classification systems. Medical terminology will be presented by body system, integrating diseases affecting each body system type. The Students learn the basics of the ICD-9 and ICD-10 medical coding classification systems to better understand the impact on the financial status of the department and/or healthcare organization. Three hours lecture per week. Prerequisite: Introduction to Health Care Management (HSMB 101) or permission of instructor.

#### HSMB 301 PUBLIC HEALTH ISSUES

#### Fall, 3 credit hours

The course begins with an overview of the history and development of public health. The student is then provided with the opportunity to examine the current public health care system. The fundamentals of epidemiology also are covered. Applications to the students' practice settings are explored. Health planning, health promotion, and global health issues are included. Three hours lecture per week. Prerequisites: Introduction to Health Services Management (HSMB 101), or permission of instructor.

#### HSMB/NURS 302

## LEGAL AND ETHICAL ISSUES IN HEALTH CARE

Spring, 3 credit hours

This writing intensive course prepares the student to examine legal and ethical issues in health care as they impact the health services manager, or others involved in health care decision making. A variety of commonly experienced legal situations and ethical dilemmas will be discussed, including the basics of civil and criminal health care law, professional liability, antitrust, managed care, organizational restructuring, patient rights, scientific research, rationing, health care practices, and other issues. The course also will educate students in legal research methods applied to the health services management field. Three hours lecture per week. Prerequisites: Public Health Issues (HSMB 301) or junior level status or permission of instructor. Writing intensive course.

#### HSMB 303 OCCUPATIONAL HEALTH AND SAFETY Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Public Health Issues (HSMB 301) or junior level status or permission of instructor.

#### HSMB 304 U.S. HEALTH CARE SYSTEM

#### Fall, 3 credit hours

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. health care system and the interrelationship of those components. Topics covered include health care in a free enterprise system, government regulation, health services access and utilization, health delivery settings, health care personnel, the pharmaceutical industry, public health, health insurance, managed care, quality of care, health policy, and other topics. Three hours lecture per week. Prerequisites: Introduction to Health Services Management (HSMB 101), or junior level status or permission of instructor.

#### HSMB 305 MANAGED CARE

Spring, 3 credit hours

Managed care is the integration of the delivery and financing of health care. This course identifies and examines the various components of managed care and the interrelationship of those components. Topics covered include insurance and risk management applied to managed care, types of managed care organizations and arrangements, funding options, delivery options, prospective payment

systems, quality assurance, outcomes measurement, contracting, provider responses, legal liability, regulation, public managed care programs, and other topics. Three hours lecture per week. Prerequisite: U.S. Health Care System (HSMB 304), or junior level status, or permission of instructor.

#### HSMB 306 HEALTH CARE FINANCING

Fall, 3 credit hours

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. Three hours lecture per week. Prerequisites: U.S. Health Care System (HSMB 304), Introduction to Finance (FSMA 210), or junior level status, or permission of instructor.

#### HSMB 307 HEALTH CARE FACILITY ADMINISTRATION

Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite: U.S. Health Care System (HSMB 304) or junior level status, or permission of instructor.

#### HSMB 308 ORIENTATION TO INTERNSHIP Fall, 1 Credit

An internship is required to complete the degree 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. Prerequisite: Senior level status or permission of instructor.

#### HSMB 310 HEALTHCARE QUALITY & PATIENT SAFETY

Fall, 3 Credit

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. Three hours lecture per week. Prerequisite: Introduction to Health Care Management (HSMB 101) or permission of instructor.

#### HSMB 330 GRANT WRITING STRATEGIES Fall 2 credit hours

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. Two hours lecture per week. Prerequisite: junior level status or permission of instructor.

#### HSMB 408 INTERNSHIP FOR HEALTH SERVICES MANAGEMENT

Spring, 3-12 credit hours

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, budget and other responsibilities. Prerequisite: Senior level status, completion of all required Health Care Management courses before participation in the internship or permission of the head of the program or Dean.

#### HSMB 410 SENIOR SEMINAR

Spring, 3 credit hours

Senior Seminar serves as a capstone course for HSM program students who are completing their internship. The course, which examines advanced issues and contemporary developments in health services management, utilizes the training students have received in their prior courses and in their internship experiences. Three hours lecture per week. Prerequisite/corequisite: Internship for Health Services Management (HSMB 408) or Internship for Veterinary Services Management (VSCT 408) or permission of the program director.

#### HUMA 189 INTRODUCTION TO ACTING

Fall/Spring, 3 credit hours GER 8

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. Three lecture hours per week.

#### HUMA 421 SUSTAINABILITY ISSUES

Fall/Spring, 3 credits

This course 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 investigate sustainability issues through lectures from several disciplinary angles, including the sciences, legal studies, economics, humanities and engineering. Following study and discourse around the problems and goals of sustainability, students work with faculty to develop a semester long independent project pursuing some of these goals. Three hours lecture per week. Prerequisites: 70 credit hours or permission of instructor required.

#### HUMA 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN HUMANITIES

Fall/Spring, 1-4 credit hours

Special Topics in Humanities will fulfill the general humanities component of the distribution requirement of the College. It may be repeated for credit depending on the content of the course. It is not a course offered on a regular basis within the department. The intent of a special topics course is to offer an educational experience which is topical, not available within the regular curricular offerings, and may even be offered interdepartmentally depending on the nature of the course.

#### HUSV 201 INTRODUCTION TO HUMAN SERVICES Fall/Spring, 3 credit hours

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. Three hours lecture per week.

#### HUSV 310 WORKING IN HUMAN SERVICE AGENCIES

Fall/Spring, 3 credit hours

This course introduces the student to an understanding of 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 those needs. Emphasis is on working with others in a human service agency, how these agencies get services to people in need, and how professionals help clients to function more effectively. Three lecture hours per week. Prerequisites: Introduction to Human Services (HUSV 201) and/or permission of instructor.

#### HUSV 420 SEMINAR IN HUMAN SERVICES Fall/Spring, 3 credit hours

Issues related to public policy, professional behavior, interpersonal dynamics, and work-related skills related to human service settings will be the focus. Students will also be expected to pursue placements for HUSV 421. Students must obtain program faculty approval before registering. Three hours lecture per week. Prerequisites: Intro to Human Services (HUSV 201) and Theory and Practice of Counseling (PSYC 310); Corequisite: Practicum in Human Services (HUSV 421); or permission of instructor

#### HUSV 421 PRACTICUM IN HUMAN SERVICES

This practicum correlates with content taught in required courses in Psychology and Human Services. Students are assigned to field experience sites working under the direct supervision of a licensed Psychologist or Social Worker. This Practicum will provide students with the opportunity to put the knowledge and skills they have learned in the classroom and laboratory into practice in a human service setting. This course, taken along with the HUSV 420 Seminar, will have written assignments, projects and case studies to complete relating to the field experience and professional topics included in the Seminar. This field experience/practicum experience will typically begin in the first semester, senior year, and is suggested for the second semester. Since students will focus on learning the skills and knowledge for careers in human services, they will NOT be able to be directly involved in decisions regarding evaluations, diagnosis, and treatment planning, since these activities are regulated by NYS Office of Professions laws. Completion of 120 hours of field experience at an off campus site. Prerequisites: Seminar in Human Services (HUSV 420).

#### INDEPENDENT STUDY

Fall/Spring, credits variable

A planned learning experience accomplished independent of formal classroom and/or laboratory sessions through written contract between a student and a member of the College's faculty. Credits earned may be applied as electives or may be taken in lieu of required subjects under special circumstances. Credits: Variable, not to exceed a total of 12 hours toward the degree or certificate.

#### INTL 400 STUDY ABROAD

Fall/Spring, 3-15 credits

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/ Corequisites: 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 hours

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. Three hours lecture per week. Open to any student.

#### JUST 105 CORRECTIONAL PHILOSOPHY

Fall/Spring, 3 credit hours

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 provides an overview of the correctional field; its origins, development, current status, and future prospects. The role of corrections and its importance in the reduction and control of crime and recidivism is evaluated. Three hours lecture per week.

#### JUST 110 CRIMINAL LAW

Fall/Spring, 3 credit hours

A study of the fundamentals of criminal law: i.e., actus reus, mens rea, distinctions between grades of offenses; criminal responsibility; and the substantive law. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### JUST 111 CRIMINAL PROCEDURE

Fall/Spring, 3 credit hours

A study of principles that regulate the balance between the power of our government and the rights of individual citizens. Topics include specific constitutional amendments, searches and seizures, stops and arrests, the use of force in effecting arrests, the use of search and/or arrest warrants, self-incrimination, and stages of criminal proceedings in the U.S. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### JUST 201 CRITICAL ISSUES IN CRIMINAL JUSTICE Fall/Spring, 3 credit hours

A study of the economic, political, ethical and emotional issues in community policing, courts and corrections. Some of the issues covered are AIDS and criminal justice services, emotional stress and coping skills needed in criminal justice employment, understanding prejudices and functioning in a culturally-diverse society, plea bargaining and the death penalty. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor. Writing intensive course.

#### JUST 203 CRIMINAL INVESTIGATIONS

Fall/Spring, 3 credit hours

This course is designed to teach those skills and knowledge necessary to conduct thorough preliminary investigations 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. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### JUST 205 CRIMINAL JUSTICE SEMINAR

Fall/Spring, 3 credit hours

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 will observe and participate in the daily functioning of an agency, share information with other students, and provide 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. Prerequisite: Sophomore level standing in the Criminal Justice, Criminal Investigations, or Law Enforcement Leadership program, or permission of instructor.

#### JUST 207 POLICE SERVICES

Fall/Spring, 3 credit hours

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. The topics include, but are not limited to: the importance of effective communication, arrest procedures, patrol strategy, enforcement of vehicle and traffic laws, violent behavior, terrorism, juvenile crime, disaster preparedness, and ethical behavior. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### JUST 209 LAW ENFORCEMENT COMMUNICATIONS

Fall/Spring, 3 credit hours

This course prepares students to write clear, accurate and grammatically correct police reports, evidence and other 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. Court testimony is also addressed. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### JUST 210 INTRODUCTION TO FORENSIC INVESTIGATION

Fall/Spring, 3 credit hours

This course familiarizes the students with various forms of forensic techniques evidence. The laboratory component of the course provides the student an opportunity to process and analyze various forms of forensic evidence. Two hours lecture and two hours of laboratory per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### JUST 211 DIAGNOSTIC EVALUATION OF THE OFFENDER

Fall/Spring, 3 credit hours

This course introduces the student to diagnostic report writing with particular emphasis on the presentence investigation report conducted by probation/parole officers. Students are guided through a series of graduated steps toward production of a comprehensive assessment of offenders. Additionally, alternatives to incarceration and their applicable use(s) with a variety of offender populations will be explored. Students will also receive instruction in the preparing of criminal justice reports to include resume and cover letter construction. Three hours lecture per week. Prerequisite: Correctional Philosophy (JUST 105) or permission of instructor. Substitute for Law Enforcement Communications (JUST 209).

#### JUST 213 PRE-EMPLOYMENT POLICE BASIC TRAINING

Spring, 6 credit hours

This course is a collection of law enforcement subjects covering a wide variety of legal and procedural issues including: U.S. Constitutional Law, Use of Force, NY State Penal Law, Laws of Arrest, Sex Crimes, Civil Liabilities and Risk Management, and Domestic Violence Laws as well as other subject areas relative to modern policing. Prerequisite: Successful screening committee process that consists of the Board of Directors of the David Sullivan – St. Lawrence County Law Enforcement Academy.

#### JUST 215 COMMUNITY-BASED CORRECTIONS Spring, 3 credit hours

This course is a study of the method and philosophy current in probation, parole, and other forms of community-based correctional services. The course material examines the role of the probation/parole officer, the community-based correctional programs director, and the community resources available to assist the probationer and parolee. This course presents the role of the probation/parole officer community corrections director as a human service agent as well as functional part of the criminal justice system. Three hours lecture per week. Limited to Criminal Justice, Criminal Investigation, and Criminal Justice: Law Enforcement Leadership students Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### **JUST 221**

#### WOMEN AND CRIMINAL JUSTICE

Fall/Spring, 3 credit hours

This course is a study of the female's role in the criminal justice system. Topics include women working in the fields of law enforcement, corrections, and the court system. The course also covers female offenders, prisoners, victims and other related topics. Three hours lecture per week. Prerequisites: Students will have successfully completed 24 college credit hours, including an intensive writing course, or permission of instructor.

#### JUST 230 FUNDAMENTALS OF HOMELAND SECURITY

Fall/Spring, 3 credits

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. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or permission of instructor.

#### JUST 255 ORGANIZED CRIME Fall/Spring, 3 credit hours

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 organized 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, and the effects of the media. Three hours lecture per week. Prerequisites: Expository Writing (ENGL 101) or Oral & Written Expression (ENGL 102), and sophomore status, or permission of instructor.

#### JUST 300 FORENSIC PHOTOGRAPHY Fall/Spring, 3 credit hours

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: Completion of 45 credit hours in a CJ major or permission of instructor.

#### JUST 301 LATENT PRINTS AND IMPRESSIONS Fall/Spring, 3 credit hours

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. Two hours lecture, two hours laboratory per week. Prerequisites: Completion of 45 credit hours in a CJ major or permission of instructor.

#### JUST 303 INVESTIGATIVE INTERVIEWS Fall/Spring, 3 credits hours

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. Two hours lecture, two hours laboratory per week. Prerequisites: Completion of 45 credit hours in a CJ major or permission of instructor.

#### JUST 310 THE CAUSES OF CRIME Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: junior level status in Criminal Investigation or Criminal Justice: Law Enforcement Leadership Program or permission of instructor.

#### JUST 313 JUVENILE JUSTICE

Fall/Spring, 3 credit hours

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. Prerequisite: Completion of 45 credit hours in a CJ major or permission of instructor.

#### JUST 314 ETHICS IN CRIMINAL JUSTICE Fall/Spring, 3 credit hours

This course provides the student with theories and practices of ethics and professionalism in criminal justice. Areas of concentration will be law enforcement, courts, and corrections. This course requires students to exercise critical thinking skills to solve issues that test the morals and ethics of criminal justice professionals on a daily basis. Three hours lecture per week. Prerequisites: Completion of 45 credit hours or permission of instructor.

#### JUST 315 CONSTITUTIONAL LAW FOR CRIMINAL JUSTICE PROFESSIONALS

Fall/Spring, 3 credit hours

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. Students may not receive credit for both JUST 315 and LEST 340 Three hours lecture per week. Prerequisites: The American Legal System (LEST 101) or Introduction to Criminal Justice (JUST 101), and 45 credit hours completed, or permission of instructor

#### JUST 317 POLICE TACTICAL SEMINAR

Fall/Spring, 3 credit hours

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 learns 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 analytical understanding of the tactical challenges faced by U.S. law enforcement officers. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) or The American Legal System (LEST 101) and 45 credit hours completed or permission of instructor.

#### JUST 320 MEDICOLEGAL INVESTIGATIONS OF DEATH

Fall/Spring, 3 credit hours

This course provides an in-depth look into the medicolegal 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. Three hours lecture per week. Prerequisites: Introduction to Criminal Justice (JUST 101), junior level status or permission of instructor.

#### JUST 321 MANAGING LAW ENFORCEMENT TRAINING

Spring, 3 credits

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 role of state oversight (P.O.S.T. type) agencies is examined. 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 and Dr. Benjamin Bloom's taxonomy of cognitive Learning. Central to the course is the understanding and appreciation of the variables associated with assessing the training needs and evaluation of training. Three hours lecture per week. Prerequisites: Introduction to Criminal Justice (JUST 101) and junior standing or permission of the instructor

#### JUST 324 SERIAL MURDERERS AND THEIR VICTIMS

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: junior level status in the Criminal Investigation or Criminal Justice: Law Enforcement Leadership program, or permission of instructor.

#### JUST 326 THREATS TO HOMELAND SECURITY Fall/Spring, 3 credit hours

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 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. Three hours lecture per week. Prerequisite: junior level status in Criminal Justice: Law Enforcement Leadership and/or Criminal Investigations, or permission of the instructor.

#### JUST 330 QUESTIONED DOCUMENTS

Fall/Spring, 3 credit hours

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 of erasures, obliterations and alterations. Two hours lecture, two hours lab per week. Prerequi-

sites: junior level status in the Criminal Investigation or Criminal Justice: Law Enforcement Leadership program, or permission of instructor.

#### JUST 333 MANAGING PATROL FUNCTIONS Fall/Spring, 3 credits

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. Three hours lecture per week. Prerequisites: Introduction to Criminal Justice (JUST101) and 45 credit hours, or permission of instructor.

#### JUST 334 IMPLEMENTING & MANAGING COMMUNITY ORIENTED POLICING PROGRAMS

Fall, 3 credits

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. Three hours lecture per week. Prerequisites/corequisites: Introduction to Criminal Justice (JUST 101) and junior level status or instructor's approval.

#### JUST 335 CRIMINAL JUSTICE AGENCY MANAGEMENT

Fall/Spring, 3 credits

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. Three hours lecture per week. Prerequisites/corequisites: junior level status in the Criminal Investigation or Criminal Justice: Law Enforcement Leadership program, or permission of instructor.

#### JUST 340 LEGAL ISSUES OF THE PENAL SYSTEMS Fall/Spring, 3 credit hours

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. Three hours lecture per week. 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 hours

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. Three hours lecture per week. Prerequisite: Correctional Philosophy (JUST 105) or permission of the instructor

#### JUST344 CIVIL LIABILITY FOR THE CRIMINAL JUSTICE ADMINISTRATOR

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Introduction to Criminal Justice (JUST 101) or permission of the instructor.

#### JUST 345 COMPARATIVE JUSTICE SYSTEMS Fall/Spring, 3 credit hours

This course is an examination of crime as a world problem, consideration of the different ways justice systems are organized, comparison of the rights of offenders and an analysis of substantive and procedural law in different legal traditions, and an examination of multi-national efforts to address specific trans-border criminal activity. Similarities and dissimilarities between urban and rural criminal justice are examined in the context of culture and social structure. Three hours lecture per week. Prerequisites: Introduction to Government (POLS 101) or Introduction to Criminal Justice (JUST 101), junior level status, or permission of instructor.

#### JUST 350 VICTIMIZATION Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Introduction to Criminal Justice (JUST 101), junior level status, or permission of instructor.

#### JUST 353 CRIMINAL JUSTICE TECHNOLOGY Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite: Completion of 45 credit hours in a CJ major or permission of

#### JUST 355 PUBLIC SAFETY CRITICAL INCIDENT RESPONSE

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite: junior level status in Criminal Justice: Law Enforcement Leadership and/or Criminal Investigations, or permission of the instructor.

#### JUST/CITA 365 DIGITAL FORENSIC ANALYSIS Fall/Spring/Summer, 3 credit hours

This course is designed to prepare the student to complete forensic analysis of digital media and to understand the process and technical challenges of internet investigations. The course looks specifically at how to obtain evidence from digital media, how to process network messages and logs while preserving the evidentiary chain, and the legal aspects of the search and seizure of digital media and related equipment and information. Two hours lecture and two hours laboratory per week. Prerequisites: Introduction to IT (CITA 110) or higher level CITA course and junior level status or permission of instructor.

#### JUST 375 METHODS OF TERRORISM THROUGH THE AGES

Fall/Spring, 3 credits hours

This course examines 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. Three hours lecture per week. Prerequisite: junior level status in Criminal Justice: Law Enforcement Leadership and/or Criminal Investigations, or permission of the instructor.

#### JUST 380 CIVIL LIBERTIES AND HOMELAND SECURITY

Fall/Spring, 3 credits hours

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. Three hours lecture per week. Prerequisite: Introduction to Criminal Justice (JUST 101) and completion of 45 credit hours in a CJ major or permission of instructor.

#### JUST 406 CRIME SCENE INVESTIGATION Fall, 3 credits hours

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. Two hours lecture and two hours laboratory per week. Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303), and Senior status in the Criminal Investigations major or permission of instructor.

#### JUST 408 THE INVESTIGATION OF DEATH Fall, 3 credit hours

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. Two hours lecture and two hours laboratory per week. Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303), and Senior status in the Criminal Investigations major or permission of instructor.

#### JUST 410 CLANDESTINE GRAVES Fall/Spring, 3 credit hours

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 will include grave location, excavation, and recovery techniques. Two hours lecture and two hours laboratory per week. Prerequisites: Forensic Photography (JUST 300), Latent Print and Impressions (JUST 301), and Investigative Interviews (JUST 303), or permission of instructor.

#### JUST 415 EMERGING ISSUES IN HOMELAND SECURITY

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite: Fundamentals of Homeland Security (JUST 230) and completion of 45 credit hours in a CJ major, or permission of instructor.

#### JUST 420 THE CORPORATE ROLE IN HOMELAND SECURITY

Fall/Spring, 3 credit hours

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 with chemical and hazardous materials inventories, shipping and transportation companies, airlines and airports, the financial services industry, and information technology and telecommunications companies are considered. Three hours lecture per week. Prerequisite: Fundamentals of Homeland Security (JUST 230) and completion of 45 credit hours in a CJ major, or permission of instructor.

#### JUST 425 LAW ENFORCEMENT INTELLIGENCE SYSTEMS IN HOMELAND SECURITY Fall/Spring, 3 credit hours

This course examines the concepts and practices involved in the process of collecting and analyzing intelligence as well as the influence of intelligence in shaping homeland security decision-making at the state and local levels. It examines the intelligence gathering and analysis capabilities of state and local criminal justice agencies and the use of intelligence processes to support homeland security policy formulation. 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

## Course Descriptions: CRIMINAL JUSTICE, LEGAL STUDIES

topics considered include open source intelligence, assessing the reliability and validity of information, intelligence sharing, covert and counterintelligence operations. Three hours lecture per week. Prerequisite: Fundamentals of Homeland Security (JUST 230) and completion of 45 credit hours in a CJ major, or permission of instructor.

#### JUST 429 INTRODUCTION TO CULMINATING EXPERIENCE SEMINAR

Fall/Spring, 1 credit hour

This course is the precursor to the senior culminating experience for seniors in either the Criminal Investigations 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. This course is a prerequisite to JUST430, Culminating Experience in Criminal Justice. One hour lecture per week. 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 hours

This internship is an academic program which integrates classroom work and practical experience with cooperating law enforcement or law enforcement related agencies. The internship allows seniors the opportunity to apply classroom learning in a related law enforcement environment. 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. Internship assignments and activities may include, but not be limited to, information gathering, research, data analysis, planning, organization, implementation, evaluation, and other tasks and responsibilities deemed necessary. 40 hours per week per credit hour. Prerequisite: All required Criminal Investigation or Criminal Justice: Law Enforcement Leadership curriculum courses or the permission of the department chair.

#### JUST 449 CURRENT ISSUES IN LAW ENFORCEMENT

Fall Semester, 3 credit hours

This course identifies current and emerging issues that may have an impact on a police manager. Students will integrate concepts such as, ethical conduct, morality, violations of civil liberties, political correctness and corruption in law enforcement. Current U.S. Supreme Court decision and opinions, federal and state mandates affecting agency policies and procedures, and community activism and involvement will be used to help students evaluate

their decisions. Prerequisites/corequisites: Introduction to Criminal Justice (JUST 101) and junior level status or permission of instructor.

#### JUST 485 FRAUD EXAMINATION AND INVESTIGATIONS

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: JUST 101, ACCT 101, and 45 credit hours or permission of Instructor.

#### JUST 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN CRIMINAL JUSTICE Fall/Spring, 1-4 credit hours

Special Topics in Criminal Justice will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available.

#### LEST 101 THE AMERICAN LEGAL SYSTEM Fall/Spring, 3 credit hours

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. Three hours lecture per week.

#### LEST 221 CRIMINAL PRACTICE Fall, 3 credit hours

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 statues, 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 permissions of instructor.

#### LEST 310 LEGAL RESEARCH

Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Successful completion of Expository Writing (ENGL 101) or Oral & Written Expression (ENGL 102), and Introduction to Information Technology (CITA 110) or its equivalent, or permission of instructor.

#### LEST 320

## NEGLIGENCE AND INTENTIONAL TORTS

#### FALL/SPRING, 3 CREDIT HOURS

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. Prerequisite/corequisite: Business Law I (BSAD 201), or professor's prior approval.

#### LEST 330 LEGAL WRITING

Spring, 3 credit hours

Instruction covers 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. Three hours lecture per week. Prerequisites: Business Communications (BSAD 200), Legal Research (LEST 310), or permission of instructor. This is a writing intensive course.

#### LEST 350 CIVIL LITIGATION

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: The American Legal System (LEST 101), Business Law II (BSAD 202), or permission of instructor.

#### LEST 360 FAMILY LAW

Fall/Spring, 3 credit hours

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. Three lecture hours per week. Prerequisites: The American Legal System (LEST 101), Business Law II (BSAD 202), or permission of instructor.

#### LEST 370 REAL PROPERTY

Fall/Spring, 3 credit hours

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. Three hours of lecture per week. Prerequisites: The American Legal System (LEST 101), Business Law II (BSAD 202), or permission of instructor.

#### LEST 375 IMMIGRATION LAW AND BORDER CONTROL

Fall/Spring, 3 credit hours

Students will understand the historical immi-

## Course Descriptions: LEGAL STUDIES, PRACTICAL NURSING

gration 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. Three hours lecture per week. Prerequisite: junior level status or permission of the instructor.

#### **LEST 380** WILLS, TRUSTS, AND ESTATES Fall/Spring, 3 credit hours

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 t heir 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. Three hours of lecture per week. Prerequisites: Legal Research (LEST 310) or junior status and approval of the instructor.

#### **LEST 410** AMERICAN INDIAN LAW AND FEDERAL **INDIAN POLICY**

Spring, 3 credit hours

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 level status or permission of instructor.

#### **LEST 429** ORIENTATION TO CULMINATING EXPERIENCE IN LEGAL STUDIES Fall/Spring, 1 credit hour

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, and performance assessment/ evaluation. This course is a prerequisite to Legal

Studies Internship (LEST 480) and Senior Project

(LEST 485). Prerequisite: Senior level status in the

Legal Studies program or permission of instructor.

LEGAL STUDIES SENIOR PROJECT Fall/Spring, 3-15 credit hours

**LEST 485** 

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. 37.5 project hours per credit

This course is an alternative to the Legal Studies Internship. It is designed for students who are

hour. Prerequisites: Internship Orientation (LEST 429) and senior status In the Legal Studies program,

**LEST 449** ADVANCED LEGAL WRITING Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite: Legal Writing (LEST 330) or permission of instructor.

#### **LEST 450** TRIAL COURT AND RULES OF EVIDENCE Fall/Spring 3 credit hours

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 the necessary tools to develop the confidence, ability, and control when presenting courtroom testimony. Three hours lecture per week. Prerequisite: The American Legal System (LEST 101) or Introduction to Criminal Justice (JUST 101) and at least Junior level status or permission of instructor.

#### **LEST 480** LEGAL STUDIES INTERNSHIP

Fall/Spring, 15 credit hours

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 level status in Legal Studies and all required courses must be completed before participating in the Internship. Students need permission of the program director or dean.

DRUG DOSAGE CALCULATIONS AND

This course introduces the principles related to

pharmacology. It examines a variety of drug classi-

fications and their effects on the body. This course

places emphasis on use of the nursing process in

drug administration and includes drug calculations.

Three hours lecture per week. Prerequisite: Practical

PRACTICAL NURSING FUNDAMENTALS

Nursing Certificate Majors only.

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 setting. A final grade of "C" or better is required to progress to the LPNC 102 and 103. Three hours lecture, three hours laboratory, twelve hours clinical per week. Corequisites: Human Anatomy and Physiology I (BIOL 217), Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) or permission of instructor. Practical Nursing Certificate Majors only.

#### LPNC 102 PRACTICAL NURSING: SPECIALTY **POPULATIONS**

Spring, 3 credit hours

LPNC 100

LPNC 101

Fall, 8 credit hours

PHARMACOLOGY

Fall, 3 credit hours

This course introduces students to data gathering and nursing care concepts focusing on maternity, newborn, pediatric, and mentally ill clients. The nursing process and critical reasoning skills are utilized to adapt nursing concepts and procedures to these special populations. Three hours lecture per week. Prerequisites: Drug Dosage Calculations and Pharmacology (LPNC 100), Practical Nursing Fundamentals (LPNC 101); corequisite: Practical Nursing: Medical-Surgical Nursing (LPNC 103); or permission of instructor. Practical Nursing Certificate Majors only.

#### LPNC 103 PRACTICAL NURSING: MEDICAL-SURGICAL NURSING

Spring, 8 credit hours

Students will utilize critical 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, and pharmacology are integrated throughout the course. Students utilize the nursing laboratory to enhance their psychomotor and critical thinking

or permission of the program director.

## Course Descriptions: PRACTICAL NURSING, MATHEMATICS

skills in practicing advanced nursing skills. Clinical experiences provide opportunities for students to apply theory/lab in the medical-surgical units of acute care hospitals. Three hours lecture, three hours laboratory, twelve hours clinical per week. Prerequisite: PN Fundamentals (LPNC 101); corequisite: Practical Nursing: Specialty Populations (LPNC 102); or permission of instructor. Practical Nursing Certificate Majors only.

#### MATH 099 FUNDAMENTALS OF APPLIED MATHEMATICS

Fall, 3 imputed credit hours

The 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. Three hours lecture per week. Prerequisites: For students with little or no algebraic 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.

#### MATH 100 BEGINNING ALGEBRA

Fall/Spring, 3 equivalent credits

This course is designed to prepare the student for Intermediate Algebra (MATH106). 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, introduction to graphing, and elementary word problems. Three hours lecture per week. Prerequisites: For students with little or no algebraic 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.

#### MATH 101 APPLIED COLLEGE MATHEMATICS Spring, 3 credit hours

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 will connect 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, law of sines and cosines, solving systems of equations graphically and algebraically, and solving quadratic equations. Applications using algebra concepts are stressed in this course. Three hours lecture per week. Prerequisite: Fundamentals of Applied Mathematics (MATH 099) with a grade of C or better, or for students who have taken 1 NYS high school regents math course or equivalent examination with a grade of 75 or above on the New

York State Regents mathematics examination, or permission of instructor.

# MATH 106 INTERMEDIATE ALGEBRA Fall/Spring, 3 credit hours

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. Prerequisite: Beginning Algebra (MATH 100) with a grade of C or better, or for students who have taken 1 NYS high school regents math course or equivalent examination with a grade of 75 or above on the New York State Regents mathematics examination, or permission of instructor.

#### MATH 111 SURVEY OF MATHEMATICS

Fall/Spring, 3 credit hours

GER 1

A study of various mathematical topics including an introduction to quantitative reasoning skills, truth table logic, sets, probability, geometry or matrices and linear programming (dependent on demand). This course is designed for non-technical oriented students. It is appropriate for students in liberal arts. Three hour lecture per week. Prerequisite: Intermediate Algebra (MATH 106) with a grade of C or better, or for students who have taken 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 hours GER 1

A 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. This course is only open to students enrolled in the elementary education transfer program. The majority of the course will be activity-based (exploration of topics through problem solving activities). Three hours lecture per week. Prerequisite: Intermediate Algebra (MATH 106) with a grade of C or better, or 2 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 116 MATHEMATICS FOR ELEMENTARY TEACHERS II

Fall/Spring, 3 credit hours

A 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. This course is only open to students enrolled in the elementary education transfer program. The majority of the course will be activity-based (exploration of topics through problem solving activities.) Three hours per week. Prerequisite: 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 hours

GER 1

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. Four hours lecture per week. Prerequisite: Intermediate Algebra (MATH 106) with a grade of C or better, or for students who have taken 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. Cannot be taken for credit by students with credit in Pre-Calculus Algebra (MATH 123).

#### MATH 123 PRE-CALCULUS ALGEBRA

Spring/Fall, 4 credit hours

GER 1

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. Four hours lecture per week. Prerequisite: Intermediate Algebra (MATH 106) 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. Cannot be taken for credit by students with credit in College Algebra (MATH 121).

#### MATH 131 COLLEGE TRIGONOMETRY

Spring, 3 credit hours

GER 1

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. Three hours lecture per week. Prerequisite: College Algebra (MATH 121) 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.

## Course Descriptions: MATHEMATICS

#### MATH 135 TECHNICAL MATH I

Fall, 4 credit hours

GER 1

This course is the first of a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics include: review of the fundamental concepts of algebra, units of measurement and approximate numbers, functions and graphs, trigonometry functions, vectors, complex numbers, systems of linear equations, determinants, factoring, rational expressions, quadratics, geometry, (areas and perimeters of common plane figures, volumes and surfaces of common solids). The TI-84 Plus graphing calculator in conjunction with the laptop may be used throughout the course. Four hours lecture per week. Prerequisite: Applied College Mathematics (MATH 101) with a grade of C or better, or for students who have taken 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 136 TECHNICAL MATH II Fall/Spring, 4 credit hours

This course is the second of a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics include: Review of the graphs of the sine and cosine function, review of complex numbers and their applications, exponents and radicals, exponential and logarithmic functions, ratio, proportion and variation, oblique triangles, inequalities, introduction to statistics and an intuitive approach to calculus. The TI-84 Plus graphing calculator in conjunction with the laptop may be used throughout the course. Four hours lecture per week. Prerequisites/corequisites: Technical Math I (MATH 135) with a grade of C or better, or permission of instructor.

#### MATH 141 STATISTICS

Fall/Spring, 3 credit hours GER 1

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, and estimation of parameters and hypothesis testing. The Chi-square distribution and Chi-square applications are covered if time permits. Three hours lecture per week. Prerequisite: 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 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 150 BUSINESS CALCULUS

Fall/Spring, 4 credit hours GER 1

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 instructor. Four hours lecture per week. Prerequisite: College Algebra (MATH 121) or 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 hours

This course is the first of a three-semester sequence of Calculus courses developed for students in Engineering Science who expect to transfer to a four-year engineering college upon completion of the program. Other qualified students may also take this sequence. Topics include: quick review of functions and graphs, limit and continuity; the derivative and its properties, differentiation of algebraic and transcendental functions, curve sketching; related rates, applied extrema problems; other applications of differentiation, numerical methods, and antidifferentiation. Four hours lecture per week. Prerequisite: 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 hours GER 1

This course is the second of a three-semester sequence in Calculus which has been designed for students in Engineering Science. Other qualified students may also take this course. 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. Four hours lecture per week. Prerequisite: Calculus I (MATH 161) with a grade of C or better recommended or permission of instructor.

#### MATH 263 CALCULUS III

Fall, 4 credits GER 1

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. Included are topics from analytic geometry, plane curves and polar coordinates, vectors, vector valued functions, and topics from dif-

ferential geometry, partial differentiation, multiple integrals, along with selected topics from vector calculus. Four hours lecture per week. Prerequisite: Calculus II (MATH 162) with a grade of C or better or permission of instructor.

#### MATH 341 STATISTICS II TBD, 3 credit hours

GER 1

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 hours lecture per week. Prerequisites: Statistics (MATH 141) with a grade of C or better, or permission of instructor.

#### MATH 351 DISCRETE MATHEMATICS Fall/Spring, 3 credit hours

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 Spring/Fall, 3 credit hours

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 hours of lecture per week. Prerequisites: Calculus II (MATH 162) with a grade of C or better or permission of the instructor.

# MATH 364 DIFFERENTIAL EQUATIONS

Spring/Fall, 4 credit hours GER 1

This course is an introduction to ordinary differential equations. Topics include: First-order, second-order, and higher-order differential equations with constant and variable coefficients, Laplace transforms, systems of linear differential equations and numerical methods, eigenvalues, and applications of first and second-order linear equations

## Course Descriptions: MATH, MECHANICAL

intended for engineering, mathematics, and physical science students requiring a working knowledge of differential equations. Three hours lecture per week. Prerequisite: Calculus II (MATH 162) with a grade of C or better or permission of instructor.

#### MATH 371 GRAPH THEORY

Spring/Fall, 3 credit hours

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 will be given to chemistry, engineering and computer science. Map colorings (including the famous four color theorem) will also be considered. Three hours of lecture per week. Prerequisites: Calculus II (MATH 162) with a grade of C or better or permission of the instructor.

#### MATH 461 ADVANCED CALCULUS I Spring/Fall, 3 credit hours

This course is sequel to Calculus III and serves as an introduction to topics in Advanced Calculus. Topics will 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 will be given

to fluid and solid mechanics, Electrostatics, and

Electromagnetism. Three hours of lecture per week.

Prerequisites: Calculus III (MATH 263) and Linear

Algebra (Math 361) with a grade of C or better or

#### MATH 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN MATHEMATICS Fall/Spring, 1-4 credit hours

permission of the instructor.

Individual courses of instruction of variable credit (1-4 credits) may be offered each semester. These courses are designed to expand on topics in specific areas of mathematics.

#### MECH 103 INTRO TO HVAC-R

Fall, 3 credit hours

This course is an introduction to heating and air conditioning systems used to achieve a comfortable indoor environment. It includes a straightforward study of heating and cooling loads and the combustion process of various fuels. Warm air, hydronic, and radiant heating systems and related controls are studied to provide technicians the knowledge to install and repair furnaces and ancillary systems. The topics of proper ventilation and refrigeration requirement of a building is developed through ASHRAE standards. Two hours lecture, two hours laboratory per week.

#### MECH 112 3D MODELING

Fall or Spring, 3 credit hours

A 3D CAD Modeling course that introduces the student to topics of dimensioning, tolerances, keys and key seats, assembly drawings, and detail drawings, Gears, and Cams. 3D Rapid prototyping systems, 3D Modeling concepts and ASME standards, will be emphasized. All CAD drawings will be created using solid modeling software. One hour lecture, four hours laboratory per week. Prerequisite: Intro to Computer Drafting (SOET 116) or permission of instructor.

#### MECH 121 MANUFACTURING PROCESSES I

Fall/Spring, 3 credit hours

This course provides an overview of material removal, change in form, change in condition, 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 the tooling and equipment. Two hours lecture, three hours laboratory per week.

#### MECH 128 ELECTROMECHANICAL TECHNOLOGY Spring, 3 credit hours

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. Two hours lecture and two hours laboratory per week. Prerequisites: College Algebra (MATH 123), College Physics I and Lab (PHYS 121/125).

#### MECH 220 ENGINEERING MATERIALS Spring, 3 credit hours

of instructor.

A study of the wide spectrum of materials used in manufacturing of discrete parts and machines. Material structure, characteristics, mechanical properties and applications will be stressed for ferrous and non-ferrous metals, plastics, and composites. Two hours lecture, three hour laboratory per week. Prerequisites: Pre Calculus Algebra (MATH 123) and College Physics I (PHYS 121) or permission

#### MECH 221 MATERIALS TESTING LABORATORY Fall, 1 credit hour

The course provides hands on experimentation in material testing as it relates to material properties for ferrous and nonferrous metals, concrete, plastics and wood. Technical report writing that meets industrial accepted standards is required. Prerequisite: Introduction to Engineering (ENGS 101)

#### MECH 222 MANUFACTURING PROCESSES II Spring, 2 credit hours

A continuation of Manufacturing Processes I. Includes forging, sawing and cutting processes, grinding operations, cutting tools and fluids, powder metallurgy and non-traditional machining processes. Process planning and determining the equipment to produce parts will lead to a better understanding of different manufacturing processes. Students will learn the fundamentals required to setup, operate and program CNC lathes and milling machines. A major emphasis is placed on the term project that requires each student to research a manufacturing process for the purpose of giving an oral presentation to the class explaining the process. The overall project requires each student submit an outline of their presentation, present their material to the class and submit a formal report to the instructor. One hour lecture, two hours laboratory per week. Prerequisite: Manufacturing Processes I (MECH 121) or permission of instructor.

#### MECH 223 INTRODUCTION TO CNC

Fall, 3 credit hours

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 hours

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. 2 – 50 minute lectures, 1-1 hour and 50 minute recitation (problem solving, projects, exams) Prerequisites/corequisites: Strength of Materials (CONS 272), or permission of instructor.

#### MECH 241 FLUID MECHANICS Spring, 3 credit hours

This course develops a basic knowledge of fluids under static and dynamic applications. Principles

## Course Descriptions: MECHANICAL

of fluid statics, fluid kinematics, fluid kinetics, and continuity theorem will explore applications in the mechanical industry. Flow rate, pipe sizing and minor losses in piping systems are addressed. Compressible flow and gas dynamics are introduced. Three hours lecture per week.

#### MECH 242 FLUID POWER LAB

Spring/Fall, 1 credit hour

A study of force and motion in hydraulic and pneumatic cylinders, 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 examined. One to two hours laboratory per week. Corequisites: Fluid Mechanics (MECH 241) or permission of instructor.

#### MECH 251 QUALITY CONTROL

Fall, 3 credit hours

Statistical concepts related to quality control. Theory, construction, and interpretation of control charts in an industrial manufacturing environment. Probability as it relates to acceptance sampling and ISO 9000 quality standards. Two hours lecture, two hours laboratory per week.

#### MECH 301 TECHNICAL DYNAMICS

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisite: Machine Design (MECH 232) or permission of instructor.

#### MECH 332 INTERMEDIATE MACHINE DESIGN Fall, 3 credit hours

This course is a continuation of Machine Design (MECH 232). 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. Three hours lecture per week. Prerequisite: Machine Design (MECH 232) or permission of instructor.

#### MECH 341 INTERMEDIATE FLUID MECHANICS Fall/Spring, 3 credit hours

This course is an in-depth study of fluid mechanics. A development of the Navier-Stokes equations to represent two and three dimensional flow will lead to a clear understanding of fluid dynamics in the real world. Additionally students will analyze

motion of time-independent and Rayleigh flow, compressible flow and topics of rotating concentric disc to boundary layer situations of airfoils. The introduction of similitude and dimensional analysis will prepare students for further topics related to fluid mechanics. Three hours of lecture per week. Prerequisites: College Physics II (PHYS 122) and Calculus I (MATH 161) or permission of instructor.

#### MECH 342 THERMODYNAMICS

Spring, 3 credit hours

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. Three hours of lecture per week. Prerequisites: College Physics II (PHYS 122) and Calculus I (MATH 161), or permission of instructor.

#### MECH 343 HEAT TRANSFER

Fall/Spring, 3 credit hours

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. Three hours of lecture per week. Prerequisites: College Physics II (PHYS 122) and Calculus I (MATH 161), or permission of instructor.

#### MECH 351 DESIGN OF EXPERIMENTS

Spring, 3 credit hours

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. Designs 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 factional designs will allow analysis for variance (ANOVA) to predict models of interactions that optimize a process. Three hours of lecture per week. Prerequisites: Calculus I (MATH 161) and Junior level status, or permission of instructor.

#### MECH 412 VIBRATION AND NOISE CONTROL

Fall/Spring, 3 credit hours

Provide guidance relevant to design, problem solving and improvement with the measurement and control of noise and vibration as applied to the industrial environment. Students study the source,

distribution and measurement of sound waves and vibrations in beams, cylinders, pipe systems, panels and mechanical equipment. Instruction includes methods for dampening noise and vibration. The use of signals generated from noise and vibration as a tool to diagnose the source of the problem and use statistical methods of analysis for determining frequency of service. Three hours of lecture per week. Prerequisites: Intermediate Fluids (MECH 341).

#### MECH 416 APPLIED COMPUTATIONAL FLUID DYNAMICS

Fall/Spring, 3 credit hours

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. Two hours lectures, two hours laboratory per week. Prerequisites: Intermediate Fluid Mechanics (MECH 341), Differential Equations (MATH 262), or permission of instructor.

#### MECH 417 APPLIED FINITE ELEMENT METHOD Fall/Spring, 3 credit hours

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. Two hours lectures, two hours laboratory per week. Prerequisites: Differential Equations (MATH 262), or permission of instructor.

#### MECH 477 CAPSTONE PROJECT Spring, 3 credit hours

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 product design, improvement of an existing product, and many others. All projects must be approved by course faculty. A minimum of 120 hours of work is required for this course. Eight hours per week. Prerequisites: Completion of seven semesters of coursework (senior level status) or permission of program director.

#### MECH 480 CO-OP EXPERIENCEE IN MECHANICAL TECHNOLOGY

Spring, 1-6 credit hours

The course provides real world learning experience. Students are expected 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. Professional cooperative education placement in a private/public organization related to the student's academic objectives and career goals. 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. Forty hours per week per credit hour request. Prerequisites: Junior standing, consent of academic advisor, approval by Dean of CSOET.

#### MECH 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN MECHANICAL **ENGINEERING TECHNOLOGY**

Fall/Spring, 1-4 credit hours

Special topics in Mechanical Engineering Technology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

#### MFGT 220 INSTRUMENTATION AND CONTROLS Fall, 3 credit hours

A course designed to focus on instrumentation and process control used in an industrial environment. Students will gain an understanding of instrumentation utilized in process control, control loop tuning and the use of automatic controls. Students will calibrate and document results to industrial standards for temperature, pressure, level and flow control loops. Students will be introduced to Labview software and interface with data collection hardware. Two hours lecture, two hours laboratory per week. Prerequisite: Electricity (ELEC 261) or permission of instructor.

#### MFGT 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN MANUFACTURING TECHNOLOGY

Fall/Spring, 1-4 credit hours

Special Topics in Manufacturing Technology will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of the instructor.

#### MINS/CITA 300 MANAGEMENT INFORMATION SYSTEMS Fall/Spring, 3 credit hours

Students learn the concepts underlying the design, implementation, control, evaluation, and strategic use of modern, 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. Three hours lecture per week. Prerequisites: Junior standing or the sum of credits earned and credits currently enrolled in is at least 60 or permission of instructor.

#### MINS/CITA 307 **CUSTOMER RELATIONSHIP** MANAGEMENT

Fall/Spring, 3 credit hours

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 customer life-cycle management, customer lifetime value and measuring customer profitability. Three hours lecture per week. Prerequisites/corequisites: Management Information Systems (MINS/CITA 300) or permission of instructor.

#### MINS/CITA 315 **DECISION SUPPORT SYSTEMS**

Fall/Spring, 3 credit hours

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/corequisites: Management Information Systems (MINS/CITA 300) or permission of instructor.

#### MINS/CITA 320 INTRODUCTION TO DATA MINING Spring, 3 credit hours

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 neural networks, nearest neighbor approaches, market basket analysis, and association rules. Three hours lecture per week. Prerequisites/corequisites: Introduction to Database (CITA 104) or Database Systems (CITA 215) and Statistics (MATH 141) or permission of instructor.

#### MINS/CITA 425 ENTERPRISE RESOURCE PLANNING Fall/Spring, 3 credit hours

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 returns on information systems investment. Three hours lecture per week. Prerequisites/ corequisites: Management Information Systems (MINS/CITA 300) and Junior standing or permission of instructor.

#### MINS/CITA 430 DATA AND KNOWLEDGE MANAGEMENT Fall/Spring, 3 credit hours

This course focuses on the development of a knowledge-management system using an organization's tacit and explicit knowledge to execute its strategy. The course explores practices entailed in developing a knowledge infrastructure, managing the interaction of people and technology, valuing knowledge assets, leveraging teams, and transferring knowledge across organizations. Three lecture hours per week. Prerequisites/corequisites: Management Information Systems (MINS/CITA 300) and Junior standing or permission of instructor.

#### MINS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN MANAGEMENT INFORMATION SYSTEMS

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in Management Information Systems.

# MOTORSPORTS SERVICE

Fall, 3 credit hours

An introduction to the general theories of systems and maintenance of motorsports vehicles, including motorcycles, snowmobiles, ATV's and personal watercraft.

#### MSPT 110 ENGINE AND POWER TRANSMISSION SERVICE

Spring, 4 credit hours

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. Prerequisite: Motorsports Service (MSPT 101) or permission of instructor. Two hours lectures, four hours laboratory per week.

#### MSPT 120 FRAME AND SUSPENSION SYSTEMS Spring, 3 credit hours

This course covers the theory, diagnostic and service procedures used in suspension and frame systems unique to the motorsports arena. Braking and suspension concerns are integrated into frame design theory. Prerequisite: Motorsport Service (MSPT 101) or permission of instructor. Two hours lecture, three hours laboratory per week.

## MSPT 130 MARINE PROPULSION

Fall, 2 credit hours

A study of the different types of propulsion systems relative to various types of aquatic craft, including jet and propeller. Theory and construction will be discussed in the context of a one-hour lecture followed by a three-hour working laboratory.

## Course Descriptions: NURSING

### NURS 100 INTRODUCTION TO NURSING

Fall, 1 credit hour
This course pro

This course provides basic information on the profession of nursing. A historical perspective of the nursing profession is presented, with current and future trends in nursing discussed. An overview of therapeutic communication, stress management, critical thinking, problem solving, data collection and infection control are included. The course also offers opportunity to build drug dosage calculation skills. This course is intended for potential nursing majors. One hour lecture per week. Prerequisites: Beginning Algebra (MATH 100) or equivalent, or permission of instructor.

#### NURS 101 FUNDAMENTALS OF NURSING Fall, 6 credit hours

This course is designed to provide the student with knowledge and skills basic to nursing. This course will enable the student to learn nursing concepts and the nursing process, while introducing nursing roles as provider and manager of care and member of the profession. The nursing laboratory on campus is used to facilitate the transfer of knowledge from the classroom to the clinical setting. Clinical nursing experiences are provided to assist students in applying NURS 101 theory in the long-term care setting. Three hours lecture, three hours laboratory, and six hours clinical per week. NURSING MAJORS ONLY.

#### NURS 102 PSYCHIATRIC AND MATERNAL CHILD NURSING

Spring, 9 credit hours

This second-level clinical nursing course is designed to assist the student in further developing skills, knowledge, and theories introduced in Fundamentals of Nursing (NURS 101) by challenging students with specialized nursing concepts. The course provides students with opportunities to learn concepts in both maternal/child and mental health nursing. Clinical learning experiences assist student in applying Nursing II concepts with persons at various levels of health and wellness for which nursing interventions are necessary. The nursing laboratory will be used to facilitate the transfer of knowledge from the classroom to the clinical area. Six hours lecture, two hours laboratory, seven hours clinical per week. Prerequisites: A grade of "C" or better in the following courses: Human Anatomy and Physiology I (BIOL 217), Fundamentals of Nursing (NURS 101), Pharmacology I (NURS 103)and Nursing Seminar (NURS 105); Introduction to Psychology (PSYC 101) and Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), or permission of instructor. NURSING MAJORS ONLY.

#### NURS 103 PHARMACOLOGY I

Fall, 1 credit hour

This introductory pharmacology course will explore the basic principles surrounding pharmacology. Topics include: medication administration,

cultural, legal, and ethical issues related to pharmacology, patient education, reduction of medication errors, and the nursing care involved in administration of drugs used to treat nutritional, eye, and ear disorders. One hour lecture per week, NURSING MAJORS ONLY or permission of instructor.

#### NURS 104 PHARMACOLOGY II

Spring, 1 credit hour

This pharmacology course will explore the various classifications of drugs, and their associated nursing care, used to treat psychiatric, reproductive, and bone/joint disorders. The course will also examine commonly used drugs during pregnancy, and those used to control pain. Pediatric drug administration will also be discussed. One hour lecture per week. Prerequisites: A gread of "C" or better in Pharmacology I (NURS 103) and Fundamentals of Nursing (NURS 101), or permission of instructor. NURSING MAJORS ONLY.

#### NURS 105 NURSING SEMINAR

Fall, 1 credit hour

This nursing course is designed to introduce the student to the concept of critical thinking and ways to improve critical thinking, especially as it relates to nursing. The course will also examine the history and development of the nursing profession and issues faced by the professional nurse in the delivery of care. Students will be required to develop a plan for succeeding in the associate degree nursing program that demonstrates self-reflection and evaluation of individual strengths and weaknesses. One hour lecture per week. ASSOCIATE DEGREE NURSING MAJORS ONLY or permission of the instructor.

#### NURS 200 PHARMACOLOGY III

Fall, 1 credit hours

This course will explore classifications of drugs used to treat skin, neuromuscular, cancer, blood, respiratory, gastrointestinal, fluid and electrolyte, and blood disorders; and discuss the nursing care associated with these agents. In addition, drugs used to treat viral and bacterial infections will be discussed as well as agents used to modify the human immune system. One hour lecture per week. Prerequisites: A grade of "C" or better in Pharmacology II (NURS 104), and Psychiatric and Maternal Child Nursing (NURS 102), or permission of instructor. NURS-ING MAJORS ONLY.

#### NURS 201 MEDICAL-SURGICAL NURSING I Fall, 10 credit hours

This medical-surgical nursing course develops knowledge, skills, attitudes, and reflection towards evidence based practice of pediatric and adult clients. Emphasis is placed on identification of high risk groups, assessment of deviation from the normal and nursing/interdisciplinary care. The nursing laboratory on campus is used to facilitate the transfer of knowledge from the classroom to the clinical setting. Clinical nursing experiences are provided

to assist students in applying NURS 201 theory in the acute care setting. Six hours lecture, three hours laboratory, and nine hours clinical per week. Prerequisites: A grade of "C" or better in the following: Human Anatomy and Physiology I (BIOL 217), Human Anatomy and Physiology II (BIOL 218); Psychiatric and Maternal Child Nursing (NURS 102) and Pharmacology II (NURS 104)); successful completion of Expository writing (ENGL 101) or Oral and Written Expression (ENGL 102) or permission of instructor. NURSING MAJORS ONLY.

#### NURS 202 MEDICAL-SURGICAL NURSING II Spring, 10 credit hours

This capstone medical-surgical nursing course enhances the student's critical reflection and dialogue, active questioning of beliefs, values, assumptions, and encourages exploration of new ways of understanding self and others. Students are encouraged to fully and freely engage in dialogue and critical thinking activities that facilitate a deep shift in their ways of thinking, reasoning, and problem solving. Students continue to utilize all skills and competencies necessary to accurately implement the nursing process holistically with diverse client populations. Students achieve their highest levels of potential while preparing for the graduate role in nursing. Clinical nursing experiences are provided to assist students in applying nursing theory in the hospital and/or community setting(s). Six hours lecture, twelve hours clinical/lab per week. Prerequisites: Medical-Surgical Nursing I (NURS 201) (minimal grade of C), Microbiology (BIOL 209) (minimal grade of C), or permission of instructor. NURSING MAJORS ONLY

#### NURS 203 PROFESSIONAL ISSUES AND TRENDS IN NURSING

Spring, 1 credit hour

This writing intensive course is designed to increase the awareness of current issues affecting the nursing profession. This course will examine the health care environment, health care finance, the political process and the nursing profession, nursing theorists and conceptual models of nursing, nursing research, nursing licensure, development of nursing as a profession, legal responsibilities for practice, ethical concerns in nursing practice, management and leadership, bioethical issues in healthcare, and nursing practice areas. One hours lecture per week. Prerequisites: Medical-Surgical Nursing I (NURS 201), Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102), all with a minimal grade of C, or permission of instructor. NURSING MAJORS ONLY.

#### NURS 204 PHARMACOLOGY IV Spring, 1 credit hour

This pharmacology course will explore the various classifications of drugs, and their associated nursing care, used to treat immune, cardiac, endocrine, renal, and nervous system disorders and emergency preparedness. One hour lecture per week.

## Course Descriptions: NURSING, PHYSICAL SCI., PTA

Prerequisites: A grade of "C" or better In Pharmacology III (NURS 200) and Medical-Surgical Nursing I (NURS 201), or permission of instructor. NURS-ING MAJORS ONLY.

#### NURS 300 CONCEPTUAL FRAMEWORKS IN NURSING

Fall, 3 credit hours

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. Three hours lecture per week. Prerequisites: Students must be enrolled in the RN-BS program or permission of instructor.

#### NURS/HSMB 301 PUBLIC HEALTH ISSUES

Fall, 3 credit hours

The course begins with an overview of the history and development of public health. The student is then provided with the opportunity to examine the current public health care system. The fundamentals of epidemiology also are covered. Applications to the students' practice settings are explored. Health planning, health promotion, and global health issues are included. Three hours lecture per week. Prerequisites: RN license or senior standing in an AS nursing program or permission of instructor.

#### NURS/HSMB 302 LEGAL AND ETHICAL ISSUES IN HEALTH CARE

Spring, 3 credit hours

The student will examine the legal and ethical issues related to health care as they impact the health services managers involved in 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 and funeral home care. Lecture, role playing, case study evaluation and guest lecturers from the field of medical law and ethics will be used to meet the objectives of the course. Three hours lecture per week. Prerequisites: RN license or senior standing in an AS nursing program or permission of instructor.

#### NURS 303 HEALTH ASSESSMENT IN NURSING Fall, 4 credit hours

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. Two hours lecture per week and 45 hour preceptorship. Prerequisite: Students must be admitted into the RN-BS program or permission of instructor.

#### NURS 304 HEALTH PROMOTION AND RESTORATION

Spring, 3 credit hours

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. Relevant community based clinical experiences, integrated throughout the course provide opportunities for the student to demonstrate evidence-based health promotion care to diverse and vulnerable populations. Three hours lecture per week. Prerequisites: Conceptual Frameworks in Nursing (NURS 300) a or permission of instructor.

#### NURS/DHYG 370 RESEARCH METHODS IN THE HEALTH SCIENCES

Fall/Spring, 3 credit hours

This course provides an intense comprehensive study of the scientific research process utilized in the social and health sciences. Students will be trained to be critical consumers of published research and will be expected to complete a research project. Topics that will be covered include the underlying theory of research; critically evaluating research; measurement; sampling techniques, establishing causation, surveys, qualitative approaches, field research, and data management and presentation. Three hours lecture per week. Prerequisite: Enrolled in RN-BS or B. Tech in Dental Hygiene program. Statistics (MATH 141) or equivalent coursework is a prerequisite/corequisite or permission of instructor.

#### NURS 400 NURSING MANAGEMENT AND LEADERSHIP

Spring, 3 credit hours

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), and Public Health Issues

(NURS 301), 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.

#### NURS 402 COMMUNITY HEALTH NURSING Fall, 3 credit hours

This course provides the student with a comprehensive introduction to the conceptual frameworks underpinning community health nursing. This course explores and promotes the caring frameworks and integrated health care concepts utilized to practice professional nursing in the community setting. Public health principles, nursing theory and skills, the impact of global health status, and our continuing national health agendas are themes interwoven throughout the course. The clinical component provides an opportunity to apply theoretical content in the community setting. Two hours lecture, 45 hour preceptorship. Prerequisites: Conceptual Frameworks in Nursing, (NURS 300), Public Health Issues (NURS 301), Health Assessment in Nursing (NURS 303) and senior level status or permission of instructor. Corequisite: Health Promotion and Restoration (NURS 304).

#### NURS 403 TRANSCULTURAL NURSING Spring, 2 credit hours

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. Knowledge, understanding, and sensitivity to diverse cultural values and meanings are an interwoven theme throughout the course content. Two hours lecture. Prerequisites: Research Methods in Health Sciences (Nursing 370), senior level status or permission of instructor.

#### PHSC 101-LECTURE PHSC 102-LAB PHYSICAL SCIENCE

Fall/Spring, 3–4 credit hours

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The major concepts of many of the physical sciences are presented, with physics and chemistry being covered extensively. Special emphasis is placed on how these concepts are related to the society and environment in which the students operate. No science background is assumed. Basic math skills are desirable but not essential. Three hours lecture per week. If lab is elected, an additional two hours laboratory per week is required.

#### PHTA 100 INTRODUCTION TO PHYSICAL THERAPY

Fall, 3 credit hours

Physical Therapist Assistant students are introduced to the discipline of physical therapy including history and philosophies. They receive introduction to a variety of practice settings and the team approach to rehabilitation. Students are familiarized with the Guide to Physical Therapist Practice and uniform terminology. Scope of practice, the New York State Practice Act, and ethical standards of conduct of the physical therapist assistant and the core values of physical therapy are identified. Medical terminology is introduced as an on-line self-tutorial. Students are introduced to basic physical therapy documentation and reimbursement issues. Cultural awareness is discussed and students begin to learn about interaction with individuals from cultures different than their own. Two hours lecture, one hour on-line per week. Prerequisite: acceptance into PTA program or permission of instructor Corequisites: Fundamental Physical Therapy Skill and Modalities (PHTA 101), Human Anatomy and Physiology I (BIOL 217) and Clinical I (PHTA 104).

#### PHTA 101 FUNDAMENTAL PHYSICAL THERAPY SKILLS AND MODALITIES

Fall, 3 credit hours

Physical Therapist Assistant students are introduced to fundamental physical therapy skills including documentation, proper body mechanics, patient preparation, positioning, dependent mobility, assisted transfers, passive joint range of motion, assisted ambulation and aseptic techniques. Thermal modalities and massage are studied and applied. The PTA student begins learning patient data collection including standard vital signs and anthropometric measurements. The student begins to describe and recognize the functional status and progression and safety of patients while engaged in gait, locomotion, wheelchair management, and mobility activities. Two hours lecture, three hours laboratory per week. Prerequisite: Acceptance into the PTA curriculum or permission of instructor. Corequisites: Introduction to Physical Therapy (PHTA 100), Human Anatomy & Physiology I (BIOL 217), Clinical I (PHTA 104).

#### PHTA 102 KINESIOLOGY

Spring, 3 credit hours

Study and application of human motion is covered beginning with general anatomic terminology and concepts, types and laws of motion, bone, joint and muscle structure and function. Origins, insertions, actions and innervations of extremity and trunk musculature and palpable surfaces of same are discussed. Kinesiological concepts related to the gait cycle, posture, and functional movement are addressed. Two hours lecture, two hours laboratory per week. Prerequisite: Human Anatomy and Physiology I (BIOL 217) or permission of instructor.

#### PHTA 103 MUSCULOSKELETAL PATHOLOGIES Spring, 4 credit hours

Students are introduced to tissue healing in relation to musculoskeletal pathologies and their role in assisting the physical therapist with management of this patient population. The principles and techniques of therapeutic exercise are presented and related to specific musculoskeletal pathologies across the lifespan. The student will learn to apply a variety of exercise techniques when given the physical therapy plan and goals/expected outcomes. There will be a focus on educating the patient and/or care giver throughout the course. Students will also begin to read and understand professional literature. Three hours lecture, three hours laboratory per week. Prerequisites: Introduction to Physical Therapy (PHTA 100), Fundamental Physical Therapy Skills (PHTA 101), Clinical I (PHTA 104) and Human Anatomy and Physiology I (BIOL 217) or permission of instructor. Corequisites: Kinesiology (PHTA 102), Musculoskeletal Assessment Techniques (PHTA 105), Clinical II (PHTA 106) and Human Anatomy and Physiology II (BIOL 218).

#### PHTA 104 CLINICAL I

Fall, 1 credit hour

Students are assigned in small groups to physical therapy clinical sites where they will work under the direct supervision of a licensed physical therapist or physical therapist assistant. Emphasis in this semester is on integration of skills learned in PHTA coursework during the fall semester, including professional behaviors, communication, bed mobility, transfers, vital signs, basic exercise, and gait training. This course provides the student with the opportunity to put the knowledge and skills he/she has acquired so far in the classroom and laboratory into practice in a clinical setting. Eight hours per week, once every three weeks. Corequisites: Introduction to Physical Therapy (PHTA 100), and Fundamental Physical Therapy Skills and Modalities (PHTA 101), or permission of instructor.

#### PHTA 105 MUSCULOSKELETAL ASSESSMENT TECHNIQUES

Spring, 2 credit hours

This course introduces students to data collection tools used to assist the physical therapist with assessment of the musculoskeletal system. Emphasis will be placed on developing skill competency with goniometry and manual muscle testing, and postural assessment. Students will also gain familiarity with common medical imaging tests, orthopedic special tests, and functional assessments. One hour of lecture, and two hours laboratory per week in the second semester of the Physical Therapist Assistant curriculum. Prerequisites: Introduction to Physical Therapy (PHTA 100), Fundamental Physical Therapy Skills (PHTA 101), Clinical I (PHTA 104), and Human Anatomy and Physiology I (BIOL 217). Corequisites: Kinesiology (PHTA 102), Musculoskeletal Pathologies (PHTA 103), Clinical II (PHTA 106), and Human Anatomy and Physiology II (BIOL 218), or permission of instructor.

#### PHTA 106 CLINICAL II

Spring, 1 credit hour

Students are assigned in small groups to physical therapy clinical sites where they will work under the direct supervision of a licensed physical therapist or physical therapist assistant. Emphasis in this semester is on integration of skills learned in PHTA coursework during the fall & spring semesters appropriate to the outpatient orthopedic physical therapy setting, including professional behaviors, communication, documentation, reimbursement, therapeutic exercise, thermal modalities, massage, & musculoskeletal data collection, emphasizing joint range of motion & manual muscle testing. This course provides the student with the opportunity to put the knowledge and skills he/she has acquired so far in the classroom and laboratory into practice in a clinical setting. Prerequisites: Introduction to Physical Therapy (PHTA 100), Fundamental Physical Therapy Skills (PHTA 101), Clinical I (PHTA 104), and Human Anatomy and Physiology I (BIOL 217). Corequisites: Kinesiology (PHTA 102), Musculoskeletal Pathologies (PHTA 103), Musculoskeletal Assessment Techniques (PHTA 105), and Human Anatomy and Physiology II (BIOL 218).

#### PHTA 203 PTA SEMINAR I

Fall, 3 credit hours

This seminar course allows second year PTA students to engage in activities and discussions that will facilitate the development of the Values Based Behaviors of physical therapist assistant practice Inclass assignments and discussion, as well as outside activities, will foster the students' integration of the American Physical Therapy Association Values Based Behaviors for the PTA: altruism, compassion/caring, continuing competence, integrity, duty, PT/PTA collaboration, and social responsibility in preparation for culminating clinical affiliation experiences and clinical practice as a Physical Therapist Assistant. This course satisfies the writing intensive requirement for the PTA curriculum. Three hours lecture per week. Prerequisites: Successful completion of all coursework in the first two semesters of the PTA curriculum or permission of instructor. PHTA majors only.

#### PHTA 204 CARDIOPULMONARY AND INTEGUMENTARY PATHOLOGIES

Fall, 3 credit hours

In the first half of the semester students will study the cardiopulmonary system and related pathologies. Cardiopulmonary rehabilitation principles and management will be discussed and applied. Students will learn about diabetes and peripheral vascular disease as a lead-in to amputee and prosthetic rehab. Management of injuries to the integumentary system, including wounds, and burns will be studied. Two hours lecture, three hours laboratory per week. Prerequisites: Successful completion of all coursework in the first two semesters of the PTA curriculum or permission of instructor. PHTA majors only.

## Course Descriptions: PHYSICAL THERAPY ASSISTANT, PHYSICS

#### PHTA 205 NEUROMUSCULAR PATHOLOGIES Fall, 4 credit hours

Neuroanatomy will be presented in preparation for the study of neurological assessments and facilitation techniques used in treatment of persons with neuromuscular pathologies. Normal, fine, and gross motor development and neuropathologies, both central and peripheral, throughout the life span will be discussed and treatment techniques practiced. Two hours lecture, four hours laboratory per week. Prerequisites: Successful completion of all coursework in the first two semesters of the PTA curriculum or permission of instructor. PHTA majors only.

#### PHTA 206 ADVANCED PHYSICAL THERAPY MODALITIES

Fall, 2 credit hours

Students will learn basic principles of electricity and electrotherapy. Application of electrotherapeutic agents for pain control, neuromuscular stimulation, and tissue/wound healing will be studied and applied. Students will be introduced to spinal traction as a therapeutic modality. Students will enhance their research skills by reviewing and critiquing current professional literature related to various course topics. One hour lecture, three hours laboratory per week. Prerequisites: Successful completion of all coursework in the first two semesters of the PTA curriculum or permission of instructor. PHTA majors only.

#### PHTA 207 CLINICAL III

Spring, 7credit hours

This clinical practicum correlates with content taught in courses PHTA 100 through PHTA 206. The student is assigned to a physical therapy clinical site where he/she will work under the direct supervision of a licensed physical therapist or registered physical therapist assistant. This will provide the student with the opportunity to put the knowledge and skills they have learned in the classroom and laboratory into practice in a clinical setting. The PTA student will demonstrate clinical problem solving skills based on their academic knowledge and previous lab and clinical experiences. This experience will begin the fourth semester and will last seven full-time weeks. Prerequisites: Successful completion of first three semesters of PTA curriculum or permission of instructor. For PHTA majors only.

#### PHTA 209 CLINICAL IV

Spring, 7 credit hours

This clinical practicum correlates with content taught in courses PHTA 100 through PHTA 207. The student is assigned to a physical therapy clinical site where he/she will work under the direct supervision of a licensed physical therapist or registered physical therapist assistant. This will provide the student with the opportunity to put the knowledge

and skills they have learned in the classroom and laboratory into practice in a clinical setting as well as expand their practical knowledge learned in prior clinical courses I, II, and III. This experience will begin in mid fourth semester and will last seven full time weeks. Prerequisites: Successful completion of first three semesters of PTA curriculum and Clinical III (PHTA 207) or permission of instructor. For PHTA majors only.

#### PHTA 210 PTA SEMINAR II

Spring, 2 credit hours

This course is designed to provide for the transition from the student role to the graduate role. Web-based review of national exam material will occur throughout the fourth semester of the PTA curriculum. Once back on campus students will participate in transitional preparation by performing licensing and interviewing procedures and sit for a mock national exam. Students will be required to submit a self-directed plan for career development and lifelong learning. A student/director conference is required for each student prior to graduation. Fifteen hours lecture per week for one week, and one hour online per week for 15 weeks. Prerequisites: First three semesters PTA curriculum. Co-requisites: Clinical III (PHTA 207) and Clinical IV (PHTA 209) or permission of instructor. PHTA majors only.

#### PHYS 115 BASIC PHYSICS

Fall/Spring, 4 credit hours GER 2

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, power. Emphasis is on development of laboratory and problem-solving skills including description, organization, analysis, summarization, and criticism in accordance with the scientific method. Four hours lecture per week. Prerequisites: Beginning Algebra (MATH 100) or permission of instructor. No science background is assumed.

#### PHYS 121 COLLEGE PHYSICS I

Fall/Spring, 3 credit hours GER 2

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. Usually taken concurrently with Physics Lab I (PHYS 125). Three to four hours lecture per week. Prerequisite: Intermediate Algebra (MATH 106). Corequisite: College Algebra (MATH 121) or permission of instructor.

#### PHYS 122 COLLEGE PHYSICS II

Spring, 3 credit hours

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 properties of solids and fluids, temperature, heat, laws of thermodynamics, electric forces and fields, electrical energy, capacitance and resistance, direct current circuits, reflection and refraction of light, wave optics. Usually taken concurrently with Physics Lab II (PHYS 126). Three to four hours of lecture per week. Prerequisite: College Physics I (PHYS 121) or permission of instructor.

#### PHYS 125 PHYSICS LAB I

Fall/Spring, 1 credit hour

GER 2

Physics Laboratory I is a laboratory course to accompany College Physics I (PHYS 121) or University Physics I (PHYS 131). Students in these two courses will have common laboratory experiments concerning translational mechanics, rotational mechanics and graphical analysis. This course is designated as writing intensive. Two hours laboratory per week. Corequisite: College Physics I (PHYS 121) or University Physics I (PHYS 131) or permission of instructor.

#### PHYS 126 PHYSICS LAB II

Spring, 1 credit hour

GER 2

This is a laboratory course to accompany College Physics II (PHYS 122) or University Physics II (PHYS 132). Experiments examine electricity, DC circuits, AC circuits and optics. This course is designated as writing intensive. Two hours laboratory per week. Corequisite: College Physics II (PHYS 122) or University Physics II (PHYS 132) or permission of instructor.

#### PHYS 137 PHYSICS LAB III

Fall, 1 credit hour

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. Two hours laboratory per week. Corequisite: University Physics III (PHYS 133) or permission of instructor.

#### PHYS 131 UNIVERSITY PHYSICS I

Fall/Spring, 3 credit hours

GER 2

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. Usually taken concurrently with Physics Lab I (PHYS 125). Three to four hours of lecture per week. Prior exposure to physics recommended. In some unusual situations,

## Course Descriptions: PHYSICS, POLITICAL SCIENCE

permission of instructor may be given. Corequisite: Calculus I (MATH 161) or permission of instructor.

#### PHYS 132 UNIVERSITY PHYSICS II

Spring, 3 credit hours GER2

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, AC and DC circuits, EM waves, geometric optics and physical optics. Usually taken concurrently with Physics Lab II (PHYS 126). Three hours lecture per week. Prerequisite: University Physics I (PHYS 131); Corequisite: Calculus II (MATH 162); or permission of instructor

#### PHYS 133 UNIVERSITY PHYSICS III

Fall, 3 credit hours 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 laws of thermodynamics and kinetic theory of gases. Usually taken concurrently with Physics Lab III (PHYS 127). Three to four hours of lecture per week. Prerequisite: University Physics I (PHYS 131); Corequisite: Calculus II (MATH 162); or permission of instructor.

#### PHYS 135 UNIVERSITY PHYSICS LABORATORY I

Fall, 1 credit hours 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. Two laboratory hours per week. Co-requisite(s): PHYS 131, University Physics I or permission of instructor.

# PHYS 136 UNIVERSITY PHYSICS LABORATORY II Fall, 1 credit bours GER

This is a laboratory course to accompany University Physics II (PHYS132). Experiments examine electricity, DC circuits, AC circuits and optics. Two laboratory hours per week. Co-requisite(s): PHYS 132, University Physics II or permission of instructor.

#### PHYS 202 MODERN PHYSICS

Spring, 3 credit hours

The atomic view of matter, electricity and radiation, 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. Three hours lecture per week. Prerequisite: University Physics II (PHYS 132) or permission of instructor.

#### PHYS 301

#### INTRODUCTION TO PHOTONICS

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: College Physics II (PHYS 122) or University Physics II (PHYS 132), or permission of instructor.

#### PHYS 330 INTRODUCTION TO CLASSICAL MECHANICS

Fall/Spring, 3 credit hours

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, oscillation, LaGrangian and Hamiltonian equations. Three hours of lecture per week. Prerequisites: University Physics II (PHYS 132) or College Physics II (PHYS 122), or permission of instructor.

#### PHYS 340 ELECTROMAGNETISM

Fall/Spring, 3 credit hours

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. Three hours of lecture per week. Prerequisites: University Physics II (PHYS 132) or College Physics II (PHYS 122), Calculus II (MATH 162), or permission of instructor.

#### PHYS 410 SOLID STATE SCIENCE

Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Modern Physics (PHYS 202) or permission of instructor.

#### PHYS 420 INTRODUCTION TO QUANTUM MECHANICS

Fall, 3 credit hours

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. Three hours lecture per week. Prerequisite: University Physics II (PHYS 132) or College Physics II (PHYS 122; Calculus II (MATH 162), or permission of instructor.

#### PHYS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN PHYSICS

Fall/Spring, 1-4 credit hours

Special Topics in Physics will generally include topics of current interest or topics not covered in courses currently offered by the department or in combinations not currently available. Prerequisite: permission of instructor.

#### POLS 101 INTRODUCTION TO POLITICAL SCIENCE

Fall/Spring 3 credit hours

A study of major political concepts and approaches with emphasis on origin and nature of political systems. This course will also focus on structures and functions of political systems, rights and responsibilities of individuals, institutions, and political organizations such as interest groups, political parties, etc. Three hours lecture per week.

#### POLS 105 INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS

Spring, 3 credit hours

GER 3

GER 3

Continuation of the analysis of the United States political system, national government and politics, historical and current issues, the United States and international law and politics. Three hours lecture per week.

#### POLS 120 COMPARATIVE POLITICS AND GOVERNMENT

Spring, 3 credit hours

This course presents a comparative analysis of historical development of key institutions of government, operations of government, political leadership, process, and change, policy making process and present evaluation of political performance in selected democratic, socialist, and third world countries. Three hours lecture per week.

#### POLS 200

# INTERNATIONAL POLITICAL ECONOMY Fall/Spring, 3 credits hours GER 3

The economic effect of globalization on the international political economy and individual national economies has sparked significant debate and conflict. The focus of this course is the development

## Course Descriptions: PSYCHOLOGY

of the relationship between states and markets. Concentrating on economic exchange in modern times, with emphasis on the 20<sup>th</sup> Century, this course introduces the major theoretical approaches and tools used in analysis of international and domestic political economy. The course also introduces policy issues in areas such as export-oriented development, common-pool resource management, and welfare policy in a globalized world. While utilizing insights from economics, emphasis is on the political dynamics that underpin cooperation and conflict in such areas as international trade, regional integration, and development. Three hours lecture per week.

#### POLS 201 CONSTITUTIONAL LAW AND CIVIL LIBERTIES

Fall, 3 credit hours

An examination of the principles and Processes of the American judicial system, constitutional issues defining the relationship between law enforcement and civil rights and liberties will be discussed to acquaint the student with the special problems of justice in a democratic society. Three hours lecture per week. Prerequisite: Introduction to Government and Politics (POLS 101) or permission of the instructor.

#### POLS 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN POLITICS

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in politics.

#### PSYC 101 INTRODUCTORY PSYCHOLOGY

Fall/Spring, 3 credit hours GER 3

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. Three hours lecture per week.

#### PSYC 111 APPLIED PSYCHOLOGY

Fall/Spring, 3 credit hours GER 3

A survey of psychological principles and research-supported findings in the following applied areas: psychology applied to human adjustment; applications of psychology to business and industry, and consumer psychology. An additional option might include the topic of psychology applied to criminal behavior. Three hours lecture per week.

#### PSYC 220

#### CHILD DEVELOPMENT

Fall/Spring, 3 credit hours

An eclectic approach to the growth and development of the child from conception to adolescence. Various theories and research will be covered to give a balanced picture of the changes that occur in areas such as cognition, personality, social relationships, behavior, physical development, and sociocultural

factors throughout the life of a child. Three hours lecture per week (with optional placement at a day care center). This course is an alternate to Human Development (PSYC 225). Students may receive credit for only one developmental psychology course. Prerequisite: Introductory Psychology (PSYC 101) or permission of instructor.

#### PSYC 225 HUMAN DEVELOPMENT

Fall/Spring, 3 credit hours

A systematic study of behavior from conception through death with emphasis on the psychosocial, biosocial, cognitive development and sociocultural factors affecting humans during various stages of development. Special emphasis is placed on scientific methods of human study and the understanding and treatment of common behavioral problems. Three hours lecture per week. This course is an alternate to Child Development (PSYC 220). Students cannot receive credit for both. Prerequisite: Introductory Psychology (PSYC 101), or permission of instructor.

#### PSYC 275 ABNORMAL PSYCHOLOGY Fall/Spring, 3 credit hours

An overview and critical study of the types and symptoms of mental and emotional disorders, emphasizing their causes, classification, and treatment from a variety of perspectives. This course will present the major theoretical approaches to understanding abnormality including psychodynamic, behavioral, cognitive, humanistic, existential, family systems, sociocultural, and medical. The course will include a critique of historical and current trends, myths, controversies, and misunderstandings surrounding psychological abnormality. Three hours lecture per week. Prerequisite: Introductory Psychology (PSYC 101) or Applied Psychology (PSYC 111), or permission of instructor.

#### PSYC 310 COUNSELING THEORIES AND PRACTICE Fall/Spring, 3 credit hours

This course is a survey of the major theories of psychological counseling and common issues and principles in the practice of the helping professions. A critical presentation of the theoretical models focuses on the concepts, principles, techniques, goals, and contributions of each approach to counseling. The uses and limitations of each theory are discussed. Issues related to the helping professions are include standards of professionalism, ethics, and legalities. Three hours lecture per week. 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 instructor.

#### PSYC 315 CRISES INTERVENTION Fall/spring, 3 credit hours

This course introduces students 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. It 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, culturally diverse populations, victims of violence, victims of disaster or terrorism, and vicarious trauma experienced by care-givers. Students will learn through case studies, readings, group activities and role-play experiences. Three hours lecture per week. Prerequisites: Child Development (PSYC 220) or Human Development (PSYC 225) or Abnormal Psychology (PSYC 275), or permission of instructor.

#### PSYC/HEFI 320 PSYCHOLOGY OF HEALTH AND FITNESS Fall/Spring, 3 credit hours

This course will examine 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 will be discussed. The concept of Positive Psychology, a strength-based, preventive approach to personal and community research and interventions will be an integral part of the course. Three hours lecture per week. Prerequisite: Human Development (PSYC 225), junior level status, or permission of instructor.

#### PSYC 340 SOCIAL PSYCHOLOGY

Fall/Spring or online, 3 credit hours

An introduction to the scientific study of how thoughts, feelings, and behaviors are influenced by other people. The course encompasses fundamental principles and theories including attitude formation and change, persuasion, perceptions of the self and other people, conformity, group dynamics, romantic and close relationships, prejudice, aggression, and helping behaviors. Application of theories to realworld settings will be emphasized, the role of culture will be incorporated into the course, and historical as well as current trends in the field will be discussed. Three hours lecture per week. 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 Spring, 3 credit hours

A study of 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. Three hours lecture per week. Prerequisites: A grade of C or better in Child Development (PSYC 220) or Human Development(PSYC 225) and a minimum of 30 credit hours with a GPA of 2.0.

## Course Descriptions: PSYCHOLOGY, SOCIOLOGY, SOET

#### **PSYC 360** ORGANIZATIONAL PSYCHOLOGY Fall/Spring, 3 credit hours

An examination of the behavior of people in

organizations. Topics include learning in organizations, motivating people, giving performance feedback, group processes, enhancing organizational effectiveness, personnel issues, morality and ethics in organizations, and helping people deal with stress. Three hours lecture per week. Prerequisite: Introduction to Psychology (PSYC 101) or Introduction to Sociology (SOCI 101) or Introduction to the Science and Technology of Behavior (SSCI 245), or permission of instructor.

#### PSYC 410 **COUNSELING SKILLS AND PROCESS** Fall/Spring, 3 credit hours

This course is an examination and practice of the skills, techniques, and process of counseling for students entering one of the helping professions. Specific techniques are described, demonstrated and practiced. The stages of the counseling process and the goals and methods of each stage are discussed and practiced. Three hours lecture per week. Prerequisites: Counseling Theories and Practice (PSYC 310) with a grade of "C" or better or permission of the instructor.

### PSYC 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN PSYCHOLOGY

Fall/Spring, 1-4 credit hours

Individual courses of instruction of variable credit (1-4 credits) may be offered each semester. These courses are designed to expand on topics in specific areas of psychology. Prerequisite: depends on the nature of each course.

#### **SOCI 101** INTRODUCTION TO SOCIOLOGY

Fall/Spring, 3 credit hours GER 3

This course provides an introduction to the discipline of sociology, including historic development, reliance on scientific method, core concepts and theories, and units of analysis from the dyad to society. Three hours lecture per week.

#### SOCI 105 AMERICAN SOCIAL PROBLEMS

Fall/Spring, 3 credit hours GER 3

A sociological perspective on the origin, nature, impact and policies which address contemporary problems. Emphasis will be placed on institutional/ macro sociological analysis interrelationships, and the global context of American problems. Three hours lecture per week.

#### **SOCI 205** SOCIAL DEVIANCE AND CONTROL

Fall/Spring, 3 credit hours

Social deviance is the study of actions, attitudes and attributes which are disvalued and violate societal norms. Deviance includes such state-sanctioned activities as criminal behavior and delinquency to a range of actions and attitudes that challenge the normative order of society. This course will provide a detailed examination of the general theories, and range of empirical data, that attempt to explain the

existence and occurrence of deviance. Three hours lecture per week. Prerequisite: Introduction to Sociology (SOCI 101) or permission of instructor.

#### SOCI 210 SOCIOLOGY OF THE FAMILY

Fall, 3 credit hours

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.

#### SOCI 250 SOCIOLOGY OF THE MASS MEDIA Fall/Spring, 3 Credit hours

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. Three hours lecture per week. Prerequisite: Introduction to Sociology (SOCI 101) or permission of instructor.

#### **SOCI 300** RACE AND ETHNIC RELATIONS: AMERICAN AND GLOBAL PERSPECTIVES Spring, 3 credit hours

This course provides an overview and critical assessment of racial and ethnic relations. The student will be exposed to theories and research that explore 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 overview critical issues in racial and ethnic relations from a global context. Three hours lecture per week. Prerequisite: Introduction to Sociology (SOCI 101) or permission of instructor.

#### SOCI 305 GENDER IN THE MEDIA Fall/Spring, 3 credit hours.

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. Three hours lecture per week. Prerequisites: Introduction to Sociology (SOCI 101) (with a grade of C or better) and junior level status with a GPA 2.00, or permission of instructor.

### SOCI 313 WOMEN AND AGING

Fall/Spring, 3 credit hours

This course provides an extensive exploration of the impact of aging on 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. Three hours lecture per week. Prerequisite: Introduction to Sociology (SOCI 101). Additionally, students must have at least junior level status or permission of instructor.

#### SOCI 320 SOCIOLOGY OF HEALTH, ILLNESS AND HEALTH CARE

Fall/Spring, 3 credit hours

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 will challenge 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. Three hours lecture per week. Prerequisites: Junior level status; Introduction to Sociology (SOCI101) or Introduction to Gerontology (HLTH 104 / SOCI104) or permission of instructor.

#### SOCI 330 SOCIOLOGY OF GENDERED LIVES Fall/Spring, 3 credit hours

This course focuses on 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 concern with gender. Three hours lecture per week or hybrid. Prerequisites/corequisites: Introduction to Sociology (SOCI 101) or American Social Problems (SOCI 105) or permission of instructor.

### SOCI 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN SOCIOLOGY

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in sociology.

## Course Descriptions: SOET, SPANISH

#### **SOET 101**

## INTRODUCTION TO COMPUTER USAGE FOR TECHNICIANS

Fall/Spring, 1 credit hour

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 will be introduced with laboratory assignments and instruction oriented toward meeting the academic & career needs students seeking certain A.A.S degrees and Certificates. Two hours per week in a computer classroom.

#### SOET 116 INTRODUCTION TO COMPUTER AIDED DRAFTING AND DESIGN

Fall, 2 credit hours

This course introduces the student to the use of a computer to produce engineering drawings. Students shall learn fundamentals functions of Auto-CAD 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. Four hours laboratory per week.

#### SOET 250 INTRODUCTION TO 3D CAD AND BIM Fall, 2 credit hours

This course introduces students to commercial construction drawings using object based CADD/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. Two, two-hour laboratories per week.

#### SOET 348 ENGINEERING SAFETY

Spring, 1 credit hour

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. Student with Occupational Safety and Health Administration (OSHA) certification will receive credit for this course (SOET 348). One hour lecture per week. Prerequisites: Student should be in his/her second year, or permission of instructor.

#### SOET 352 ADVANCED REVIT AND BUILDING INFORMATION MODELING (BIM) MANAGEMENT

Fall, 3 credit hours

Building Information Modeling (BIM) generates and manages all components of a building's life cycle. BIM is a new industry standard, knowledge

and efficiency with 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, students learn how 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: Intro to 3D CADD and BIM (SOET 250).

#### SOET 361 PROJECT MANAGEMENT Fall, 3 credit hours

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. Three hours of lecture per week. Prerequisites: Junior standing or permission from instructor.

#### SOET 370 ENGINEERING PROJECT ANALYSIS Fall/Spring, 3 credit hours

This course will focus on engineering project analysis of plans, design, and systems, including taking no action, in consideration of life cycle costs, user costs, and cash flow. Each engineering project will consider cost of funds (interest) depreciation, amortization, salvage value, taxation, capital cost, operational and maintenance costs. Evaluations of uncertainties are also considered on a probabilistic basis. Analysis techniques include parameter estimating, benefit/cost analysis, compound interest calculations and probabilistic modeling. Applications to actual manufacturing, construction, and software case histories are stressed throughout the course. Three hours lecture per week. Prerequisite: College Algebra (MATH 121) or permission of instructor.

#### SOET 373 MANAGEMENT TELECOMMUNCIATIONS Spring/Fall, 3 credit hours

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, and how it is 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 case studies. Three hours lecture per week. Prerequisites: 30 credit hours or permission of instructor.

#### SOET 377

#### **ENGINEERING ETHICS**

Fall/Spring, 1 credit hour

This course introduces engineering technology students to issues in engineering ethics and 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. One hour lecture per week, and considered writing intensive. Prerequisites: Oral & Written Expression (ENGL 102) or permission of instructor.

#### SOET 410 ENGINEERING TECHNOLOGY SENIOR SEMINAR

Spring, 3 credit hours

This seminar course provides a forum in which students will present project/internship proposals and results to peers and faculty. Practicing professionals may be invited to 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 430 SYSTEMS ANALYSIS Fall/Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Junior/Senior level status and GER1 (math) or permission of instructor.

#### SOET 477 CAPSTONE PROJECT Fall/spring, 3 credit hours

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 product design, improvement of an existing product, and many others. All projects must be approved by course faculty. 120 hours of work dispersed throughout the semester. Prerequisites: Completion of seven semester coursework (senior level status) or permission of program director.

#### SPAN 101 CONTEMPORARY SPANISH I

Fall/Spring, 4 credit hours

GER 9

This course will introduce the student to the sound system and grammatical structure of the

## Course Descriptions: SPEECH, SPORTS MANAGEMENT

Spanish 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. Four hours lecture per week. This course is only for the true beginner or for students who have had less than three years of high school Spanish. Four hours lecture per week. Students who have taken more than three years of high school Spanish may enroll in this course with the permission of the instructor. Speakers of Spanish may not take this course.

#### SPAN 102 CONTEMPORARY SPANISH II Spring, 4 credit hours 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. Four hours lecture per week. Prerequisite: 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 hours

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 101 FOUNDATIONS OF SPORTS MANAGEMENT

Fall/Spring, 3 credit hours

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. Three hours lecture per week.

#### SPMT 202 SPORT IN SOCIETY

Fall/Spring, 3 credit hours

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. Three hours lecture per week.

#### SPMT 203 LEADERSHIP FOR SPORT PROFESSIONALS

Fall/Spring. 3 credit hours

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. Three hours lecture per week. Prerequisites: Foundations of Sport Management (SPMT 101) or permission of instructor.

#### SPMT 240 SPORTS GOVERNANCE

Spring, 3 credit hours

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. Three hours lecture per week. Prerequisites: Foundations of Sports Management (SPMT 101) or permission of instructor.

#### SPMT 241 LEGAL ISSUES IN SPORT

Fall/Spring, 3 credit hours

This course is designed to introduce students to legal applications within the sport industry. Through the use of case studies, 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 or as a result of sporting events. Three hours lecture per week. Prerequisites: Business Law I (BSAD 201) or permission of instructor.

#### SPMT 242 SPORTS FINANCE

Spring, 3 credit hours

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. 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. Three hours lecture per week. Prerequisites: Introduction to Finance (FSMA 210) or permission of instructor.

#### SPMT 244 SPORTS STATS I

Fall, 1 credit hour

This course introduces students to the role and Importance of statistics in sports and sports organizations and the role statistics plays in sports reporting relating to the sports covered in this course. Students will be introduced to statistics and Statcrew software used in inputting and compiling statistics for the following sports: golf, cross country, soccer, volleyball, and basketball. Students learn what statistics are kept for each sport and how to analyze and interpret those statistics. With hands-on training, students learn how to use Statcrew software to record live stats. In addition, students examine the ethical issues Involved in the use and reporting of sports stats from a team and global sport perspective. One hour lecture per week. Prerequisites: Foundations of Sport Management (SPMT 101) or permission of instructor.

#### SPMT 245 SPORTS STATS II

Spring, 1 credit hour

This course introduces students to the role and Importance of statistics in sports and sports organizations and the role statistics plays in sports reporting relating to the sports covered in this course. Students will be introduced to statistics and Statcrew software used in inputting and compiling statistics for the following sports: ice hockey, lacrosse, softball, and baseball. Students learn what statistics are kept for each sport and how to analyze and interpret those statistics. With hands-on training, students learn how to use Statcrew software to record live stats. In addition, students examine the ethical issues Involved in the use and reporting of sports stats from a team and global sport perspective. One hour lecture per week. Prerequisites: Foundations of Sport Management (SPMT 101) or permission of instructor.

#### SPMT 306 SPORTS OPERATIONS AND FACILITIES MANAGEMENT

Fall/Spring, 3 credit hours

This course familiarizes students with the scope and functions of operating and maintaining sport and recreation facilities. The course will provide the framework for students to learn the management, organizational tasks, and laws and guidelines required for successful and safe operation of stadiums, golf courses, aquatic centers, ski areas, playing fields, ice arenas and other sport and recreation venues. Three hours lecture per week. Prerequisites: Leadership for Sport Professionals (SPMT 203), and Sports Marketing (SPMT 307) or permission of instructor.

## Course Descriptions: Sports management, social science

#### SPMT 307 SPORTS MARKETING

Fall 3 credit hours

This course examines the various techniques and strategies used in meeting the wants and needs of consumers in the sports industry. The course also makes a comparison 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 about how data-based marketing can be used to connect them with the sports consumer and the development of sponsorship and endorsement packages. Three hours lecture per week. Prerequisites: Marketing (BSAD 350) or permission of instructor.

#### SPMT 308 SPORT EVENT MANAGEMENT

Fall/Spring, 3 credit hours

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, staffing, conducting the event, program evaluation, and other factors associated with successful management of sport events. Students will be responsible for the management of at least one college sport event on campus. Three hours lecture per week. Prerequisites: Leadership for Sports Professionals (SPMT 203) and Sports Marketing (SPMT 307) or permission of instructor.

#### SPMT 311 SPORTS INFORMATION

Spring, 3 credit hours

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 Includeing writing, publications, web site design and management, digital sports photography, and social media. Students are also introduced to the various technologies and software widely used in sports information. Three hours lecture per week. Prerequisite: Foundations of Sports Management (SPMT 101) or permission of instructor.

#### SPMT 312 SPORTS ENTREPRENEURSHIP

Fall, 3 credit hours

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. Three hours lecture per week. Prerequisites: Introduction to Business (BSAD 100), Foundations of Sports Management (SPMT 101), Sports Finance (SPMT 242), and Sports Marketing (SPMT 307) or permission of instructor.

#### SPMT 410 ORIENTATION TO CULMINATING EXPERIENCE IN SPORTS MANAGEMENT Fall/Spring, 1 credit hour

This course prepares the student for their internship or senior project in sport management. Through participation in this course, creating a mock internship and fulfilling the paperwork process will provide the student with the practical experience necessary to successfully apply for and complete their capstone internship. 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. One hour lecture per week. 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 hours

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. Three hours lecture per week. Prerequisites: Foundations of Sports Management (SPMT 101) or permission of instructor.

#### SPMT 412 SPORTS SALES AND SPONSORSHIPS Spring, 3 credit hours

In this course students will learn techniques and strategies for enhancing and expanding sport sales and sponsorships. 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. Three hours lecture per week. Prerequisites: Sports Marketing (SPMT 307) or permission of instructor.

#### SPMT 413 CONTEMPORARY ISSUES IN COLLEGE SPORTS ADMINISTRATION

Fall, 3 credit hours

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 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. Three hours lecture per week. Prerequisites: Leadership for Sports Professionals (SPMT 203) or permission of instructor.

#### SPMT 414 LABOR RELATIONS IN SPORT Fall, 3 credit hours

This course is an examination of labor markets in sport and the infrastructural interests of management (league and teams) and players (players associations, players, agents/attorneys). Students will review collective bargaining agreements and evaluate the impact of salary caps, free agency and athlete compensation frameworks. This course will examine athlete salaries and agent representation and the unique labor markets of Major League Baseball and the National Football League. Three hours lecture per week. Prerequisites: Leadership for Sports Professionals (SPMT 203) Human Resource Management (BSAD 310), or permission of instructor.

#### SPMT 415 SPORTS MEDIA AND BROADCASTING Fall, 3 credit hours

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 programs and high school sports programs as their media focus. Three hours lecture per week. Prerequisites: Sports Information (SPMT 311) or permission of instructor

#### SPMT 421 SPORTS MANAGEMENT INTERNSHIP Fall/Spring, 9-15 credit hours

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. 360–600 hours work per semester. Prerequisites: Orientation to Culminating Experience in Sports Management (SPMT 410), completion of all other professional content courses required for degree, or permission of instructor.

#### SPMT 422 SPORTS MANAGEMENT SENIOR PROJECT

Fall/Spring, 3, 6, 9, 12, or 15 credit hours

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. 112.5–562.5 project

## Course Descriptions: SOCIAL SCIENCE, VETERINARY

hours per semester. Prerequisites: Orientation to Culminating Experience in Sports Management (SPMT 410), completion of all other professional content courses required for degree, or permission of instructor.

#### SPMT 431 APPLIED SPORTS MEDIA AND BROADCASTING

Spring, 3 credit hours

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. Each student is responsible for developing and implementing a complete media strategic plan for one of the college's sports team. The plan will include writing game and feature stories, interview segments, location features, play by play and anchor coverage, and a broadcast piece. Students are also responsible for a relevant sports investigative piece for written story and broadcast. In addition, the class as a group is responsible for the creation and execution of a large Sports Center type broadcast show incorporating pieces from their individual projects. This class is conducted in conjunction with students in the Graphic and Multimedia Design program who will be involved in the video content and broadcasting components of the course. Prerequisites: Sports Media and Broadcasting (SPMT 415) or permission of instructor.

#### SPMT 432 APPLIED SPORTS EVENT MANAGEMENT Spring, 3 credit hours

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, organizing, 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: Sports Event Management (SPMT 308) or permission of instructor.

#### SSCI 181 ALCOHOL, DRUGS, AND SOCIETY

Fall/Spring, 3 credit hours GER 3

This course examines the various theories and models of drug abuse and addiction. The pharmacology of drugs and alcohol and the behavioral and social consequences of drug abuse are studied. Students will have an opportunity to explore the scope of and impact on American Society by the abuse of alcohol and drugs. Topics will include: the impact on family systems, treatment, prevention

and social control and public policy in the United States. Three hours lecture per week.

#### SSCI 221

# INTRODUCTION TO CHINESE HISTORY AND CULTURE

Fall/Spring, 3 credit hours GER 6

This course introduces students to the major aspects of Chinese history and culture. The broad outlines of the interaction between history and culture are developed though coverage of the major Chinese dynasties together with coverage of the influence of Chinese literature, language, and art, in the context of current social life. Three hours lecture per week.

#### SSCI 271

#### CONTEMPORARY GLOBAL ISSUES

Fall/Spring, 3 credit hours GER 6

This course introduces the students to global economic and political issues. The primary focus is on the global interplay between the changing resource base, dynamics of needs and concerns of human beings, and the economic, social, and political systems. The intent is to examine the extent to which our economics, social and political systems are successfully adjusting to changes in the underlying natural resource base (ecology), and contributing toward global sustainability of modernization and development. Specific topics covered each semester may vary. Three hours lecture per week.

#### SSCI 275 INTRODUCTION TO UKRAINIAN CULTURE AND HISTORY

Fall/Spring, 3 credit hours GER 5

Introduction to major aspects of Ukrainian culture and history. 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. Three hours lecture per week.

#### SSCI 315 DEATH, DYING, AND BEREAVEMENT Fall/Spring, 3 credit hours

This course is designed to present various ways in which social science views the human experience of death, dying, and bereavement. Drawing from sociology and psychology, this course will introduce macro and micro level theories and associated concepts. Micro-level concepts and theories about the interaction patterns between the dying patients and the family, medical staff and others involved will be examined. Also discussed will be: societal (or macrolevel) theories of social change, the ethical problem of euthanasia, and the needs of the dying; the biological, social, and psychological factors in the lengthening of life; and the consequences of death, dying, and bereavement. Cross-cultural experiences with these phenomena will also be examined. Three

hours lecture per week. Prerequisites: Introduction to Psychology (PSYC 101) or Introduction to Sociology (SOCI 101) and 30 credit hours, or permission of instructor.

#### SSCI 370 RESEARCH METHODS IN THE SOCIAL

Fall/Spring, 3 credit hours

**SCIENCES** 

This course provides a comprehensive study of the scientific research process utilized in the social and health sciences. Students are trained to be critical consumers of published research. Topics covered include the underlying theory of research; critically evaluating research; qualitative research analysis; quantitative research analysis: operationalization and measurement, sampling techniques, surveys, field research, secondary data analysis, experimental research, causation and statistically significant correlation; and data management and presentation. Three hours lecture per week. Prerequisite: Introduction to Psychology (PSYC 101), or Introduction to Sociology (SOCI 101), or Introduction to Science and Technology of Behavior (SSCI 245), or Principles of Macroeconomics (ECON 101), or Principles of Microeconomics (ECON 103) or permission of the instructor; Statistics (MATH 141) or equivalent course work is a Prerequisite/Corequisite. Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102) are prerequisites for this writing intensive course. Additionally, students must have at least junior level status or permission of the instructor.

#### SSCI 291-295, 391-395, OR 491-495 SPECIAL TOPICS IN SOCIAL SCIENCE

Fall/Spring, 1-4 credit hours

An introductory or more advanced exploration of subjects not covered or only partially covered by other courses in any social science discipline. The course is specified in the semester class schedule. The course will address topics which require a broader scope or an examination in greater depth. Providing a different topic is selected, the student may take this course twice for credit.

#### TMMA 310 ENERGY MANAGEMENT Fall/Spring, 3 credit hours

Energy Management is an overview course on managing energy use in buildings. Topics include energy audits, energy bills, economic analysis, and specific energy saving techniques. Three hours lecture per week. Prerequisites: Business Calculus (MATH 150), General Physics II (PHYS 102) or permission of instructor.

### VAST 105 VETERINARY ASSISTING

Spring, 1 credit hour

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

## Course Descriptions: VETERINARY

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 will also be covered, with an emphasis on meticulous disinfection, sterilization and infection control measures. Three hours laboratory per week. Prerequisite: enrollment in the Health Science Career Studies Certificate and successful completion of Medical Terminology of Disease (HLTH 200) or permission of instructor.

#### VSCT 100 HUMAN COMPANION ANIMAL BOND Fall, 1 credit hour

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. Two hours laboratory per week.

#### VSCT 101 FUNDAMENTAL VETERINARY NURSING SKILLS I

Fall, 2 credit hour

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/corequisites: College Biology I (BIOL 150), College Chemistry I (CHEM 150), Introduction to Animal Agriculture (VSCT 103), or permission of instructor.

#### VSCT 102 COMPANION ANIMAL BEHAVIOR Spring, 2 credit hours

This course is designed to help veterinary technicians gain insight and understanding into normal canine and feline behavior. The first unit of the course explores canine behavior, discussing such topics as domestication, social behavior, communication, and principles of learning. The second unit investigates feline behavior, and includes such topics as feline domestication, social behavior and communication. Students learn how to take a behavioral history, analyze problem behavior, perform appropriate behavior modification techniques, and educate clients on common pet behavior problems. Two hours lecture per week. Prerequisites: Small

Animal Medicine and Therapeutic Techniques (VSCT 203), Large Animal Medicine and Therapeutic Techniques (VSCT 204), or permission of instructor.

#### VSCT 103 INTRODUCTION TO ANIMAL AGRICULTURE

Fall/Spring, 2 credit hours

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. Two hours lecture per week.

#### VSCT 104 VETERINARY OFFICE PRACTICES Spring, 1 credit hour

This course introduces basic veterinary office practices that would be expected of a graduate veterinary technician. The course covers businesss and professional skills such as: record keeping, scheduling appointments, professionalism and client communication. This course also provides hands-on experience with current veterinary practice software. Two hours laboratory per week.

#### VSCT 112 VETERINARY CLINICAL PATHOLOGY I Spring, 3 credit hours

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 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 Veterinary Science students. Two hours lecture, two hours laboratory per week. Prerequisite/Corequisite: Animal Anatomy & Physiology (VSCT 114) and Fundamental Veterinary Nursing Skills II (VSCT 115).

#### VSCT 114 ANIMAL ANATOMY AND PHYSIOLOGY Spring, 3 credit hours

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. Enrollment limited to Veterinary Science students. Prerequisite: College Biology I (BIOL 150), Fundamental Veterinary Nursing Skills I (VSCT 101), or permission of instructor.

#### VSCT 115 FUNDAMENTAL VETERINARY NURSING SKILLS II

Spring, 2 credit hour

This course is a continuation of material and information covered in Fundamental Veterinary Nursing Skills I. Students will review and perform handling and restraint techniques on dogs and cats, and will recognize, handle, and discuss husbandry of birds, small mammals, and selected exotic species. Students will discuss instrumentation and restraint techniques for horses and livestock. Students will perform nursing procedures including diagnostic techniques, wound care and management, more advanced therapeutic procedures and injection techniques. Management and communication skills as well as client education will be further developed. One hour lecture, two hours laboratory per week. Prerequisite: Fundamental Veterinary Nursing Skills I (VSCT 101) or permission of instructor. Enrollment limited to Veterinary Science students.

#### VSCT 202 VETERINARY CLINICAL PATHOLOGY II Fall, 3 credit hours

A course of continued study (Veterinary Clinical Pathology I) dealing with diagnostic laboratory procedures and their correlation with pathological conditions. Laboratory practice in hematology, chemistry, parasitology, urinalysis, etc. of all the domestic species of animals. Limited to Veterinary Science Technology students who have satisfactorily completed the course Veterinary Clinical Pathology I (VSCT 112). Two hours lecture, two hours laboratory per week.

#### VSCT 203 SMALL ANIMAL MEDICINE AND THERAPEUTIC TECHNIQUES

Fall, 3 credit hours

This course is designed to introduce the student to many of the common procedures performed by Licensed Veterinary Technicians in a small animal clinic situation. The student 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 student with topics that veterinary practices are frequently called upon to answer. The student will demonstrate how to perform multiple techniques such as intravenous catheter placement, cystocentesis, the care and wrapping of surgical instruments, and stomach tube placement. Enrollment limited to Veterinary Science Technology students. Two hours lecture, two hours laboratory per week. Prerequisites: Fundamental Veterinary Nursing Skills I (VSCT 101), Veterinary Clinical Pathology I (VSCT 112), and Fundamental Veterinary Nursing Skills II (VSCT 115), or permission of instructor.

## Course Descriptions: VETERINARY, WOMEN'S STUDIES

#### VSCT 204 LARGE ANIMAL MEDICINE AND THERAPEUTIC TECHNIQUES Fall, 2 credit hours

A course designed to prepare the Veterinary Science student for a role in a large animal veterinary practice. The course includes records and legal forms commonly associated with large animal practice. Students will learn and practice skills associated with assisting the large animal practitioner. Presented material will focus upon areas of technician responsibility in the facility operations and management and methods for relieving the doctor of the more routine duties in favor of professional functions. Enrollment limited to Veterinary Science Technology students. One hour lecture, two hours laboratory per week. Prerequisites: Fundamental Veterinary Nursing Skills I (VSCT 101), Veterinary Clinical Pathology I (VSCT 112), and Fundamental Veterinary Nursing Skills II (VSCT 115), or permission of instructor.

#### VSCT 205 RADIOGRAPHIC TECHNIQUES Fall, 2 credit hours

This course is designed as an introduction to radiological techniques. Students will be required to position patients, calculate exposure values, expose radiographic film, and process films both manually and automatically. Students will examine radiographs taken by their groups and critique them for their diagnostic quality. Students will be instructed on radiation hazards and how to avoid them. Enrollment is limited to second year Veterinary Science Technology students. One hour lecture, two hours laboratory per week. Prerequisites: Fundamental Veterinary Nursing Skills I (VSCT 101), Animal Anatomy and Physiology (VSCT 114), and Fundamental Veterinary Nursing Skills II (VSCT 115), Veterinary Clinical Pathology I (VSCT 112), or permission of instructor.

#### VSCT 206 ANESTHETIC PRINCIPLES Fall, 3 credit hours

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 students will have handson experience with preanesthetic, anesthesia, 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. In the laboratory, the student will medicate patients with many of the commonly used anesthetic drugs and compare/contrast their effects. Two hours lecture, two hours laboratory per week. Prerequisites: Fundamental Veterinary Nursing Skills I (VSCT 101), Animal Anatomy & Physiology (VSCT 114) and Fundamental Veterinary Nursing Skills II (VSCT 115), or permission of instructor.

#### VSCT 207 HEALTH AND DISEASE OF FARM ANIMALS

Fall, 3 credit hours

This course will acquaint students with the causes, development, control, eradication, and prevention of diseases of economic importance to the farm animal owner. Three hours lecture per week. Prerequisite: College-level biology or permission of instructor.

#### VSCT 210 VETERINARY MICROBIOLOGY Spring, 3 credit hours

The focus of this course is the isolation and identification of pathogenic organisms encountered in animals and the diseases that they cause. Two hours lecture, two hours laboratory per week. Prerequisites: Microbiology (BIOL 209), Veterinary Clinical Pathology I (VSCT 112) and Veterinary Clinical Pathology II (VSCT 202), or permission of instructor.

#### VSCT 211 ANIMAL HOSPITAL PRACTICES AND PROCEDURES

Spring, 3 credit hours

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. During the laboratory, In small group settings, students perform standard duties of a veterinary technician in simulated conditions of a working veterinary practice. Skills reinforced include: surgical assisting, anesthesiology and patient monitoring, radiology, office procedures and client relationships, record keeping and laboratory testing. Students enrolling in this class are expected to perform at least two weeks of kennel duty. Enrollment is limited to Veterinary Technology students who have successfully completed all prior veterinary science courses that are required in the AAS program. Students must successfully complete this writing intensive class to comply with the residency requirement. Two hours lecture, two hours of laboratory per week.

#### VSCT 212 RESEARCH ANIMAL TECHNIQUES Spring, 1 credit hour

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

Veterinary Science Technology students. Two hours laboratory per week. Prerequisite: Fundamental Veterinary Nursing Skills I (VSCT 101) or permission of instructor.

# VSCT 213 PRACTICAL NUTRITION Spring, 2 credit hours

This course is designed for Veterinary Science Technology majors. It will cover the feeding of animals in health and disease during various stages of the life cycle. Of primary concern will be the dietary management of specific diseases that affect small animals. Two hours lecture per week. Prerequisite: Animal Anatomy & Physiology (VSCT 114), Fundamental Veterinary Nursing Skills II (VSCT 115), or permission of instructor.

#### VSCT 214 VETERINARY PHARMACOLOGY Spring, 2 credit hours

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. Prerequisites: Veterinary Clinical Pathology II (VSCT 202), Small Animal Medicine and Therapeutic Techniques (VSCT 203), and Anesthetic Principles (VSCT 206), or permission of instructor.

#### VSCT 301 VETERINARY HOSPITAL MANAGEMENT I Spring, 3 credit hours

The purpose of this course is to provide the student with current information in veterinary practice management. Students 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, veterinary hospital revenue and financial control, management of veterinary medical records, veterinary inventory control, and marketing a veterinary practice. Three hours lecture per week. Prerequisites: Enrollment in or completion of a degree in Veterinary Technology, Veterinary Science, Business Management, or Accounting; and at least 45 credits earned overall, or permission of instructor. It is strongly recommended that students take Foundations of Financial Accounting (ACCT 101) and Human Resource Management (BSAD 310) prior to taking this course.

# VETERINARY HOSPITAL MANAGEMENT II Fall, 3 credit hours

This course is a continuation of Veterinary Hospital Management I (VSCT 301). It addresses additional topics relevant to practice management such as veterinary hospital design, veterinary equipment acquisition, training and maintenance; insur-

ance and tax compliance for the veterinary facility; and finance and investment of practice profits and employee retirement contributions. 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 clinics, research animal facilities, animal shelters, zoos, and diagnostic facilities are considered. Three hours lecture per week. Prerequisite: Enrollment in or completion of a degree in Veterinary Technology, Veterinary Science, Business Management, or Accounting; and at least 45 credits earned overall, or permission of instructor. It is strongly recommended that students take Foundations of Financial Accounting (ACCT 101) and Human Resource Management (BSAD 310) prior to taking this course.

#### VSCT 303 ADVANCED VETERINARY NURSING Spring, 3 credit hours

This course aids students who have already completed basic courses in veterinary technology in developing their knowledge and skills. Companion animal, equine and bovine topics will be covered. Emphasis on specific concepts of intensive care nursing, surgical assisting in advanced or specialized techniques and advanced anesthesia techniques will be covered. Use of electronic equipment used in veterinary diagnoses will be discussed as well as its care and maintenance. Three hours lecture per week. Prerequisite: Veterinary Clinical Pathology II (VSCT 202), Small Animal Medicine and Therapeutic Techniques (VSCT 203), Radiographic Techniques (VSCT 205), Anesthetic Principles (VSCT 206), and at least 45 credits earned, or permission of instructor.

#### VSCT 308 VETERINARY SERVICES MANAGEMENT INTERNSHIP ORIENTATION

Spring, 1 credit hour

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 their internships, and establishes a contract between SUNY Canton, the internship site, and

the student. One hour lecture per week. Prerequisite: Senior level status in the Veterinary Services Management program or permission of instructor.

#### VSCT 401 ISSUES AND PERSPECTIVES IN VETERINARY MEDICINE

Fall, 3 credit hours

This writing intensive 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. Three hours lecture/recitation per week. Prerequisite: Enrollment in or completion of a degree in Veterinary Technology, Veterinary Science, Business Management, or Accounting; and at least 45 credits earned overall, or permission of instructor. It is strongly recommended that students take Foundations of Financial Accounting (ACCT 101) and Human Resource Management (BSAD 310) prior to taking this course.

#### VSCT 408 INTERNSHIP FOR VETERINARY SERVICES MANAGEMENT

Spring, 12 credit hours

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). Prerequisite/ Corequisite: Senior-level status in the Veterinary Services Management program and all required math, accounting, business, Health Services

Management, and Veterinary Science Technology courses required for the program or permission of the Program Director or Dean.

#### WMST 201 INTRODUCTION TO WOMEN'S STUDIES Fall and Spring, 3 credit hours

This course provides a broad introduction to the field of Women's Studies. From an interdisciplinary approach, this course explores past and present theories and issues about women including, but not exclusive to, class, race, social justice, emancipation, economics, and education. Through a global perspective, students will be introduced to feminist ideology and methodology, as well as the causes and effects of gender inequality. Three hours lecture per week. Prerequisite: Expository Writing (ENGL 101) or Oral and Written Expression (ENGL 102); 30 credit hours earned; or permission of the instructor.

#### WMST 401 CAPSTONE PROJECT IN WOMEN'S STUDIES

Fall/Spring, 3 credit hours

In this course, students will complete a senior research paper in the field of Women's Studies. With the guidance of the Women's Studies Coordinator and a committee of three faculty, students will complete numerous research components including, but not limited to, a research proposal, a literature review, rough draft, and final product. Three hours lecture per week. Prerequisites: Introduction to Women's Studies (WMST 201) and twelve credit hours earned toward Women's Studies Minor or permission of instructor.



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# **ABOUT SUNY**

The nation's largest and most comprehensive state university system, The State University of New York (SUNY), was founded at Potsdam, New York in 1816. Years later, the Morrill Act of 1862 led to the creation of four Ivy League land-grant SUNY colleges, which now currently exist at Cornell University. SUNY was officially established in February 1948 when New York became the 48th state, of the then 48 states, to create a state university system. 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. Since 1948 SUNY has grown to include 64 individual colleges and universities that were either formerly independent institutions or directly founded by the State University of New York.

Today, the State University of New York's 64 geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New Yorkers and comprise the nation's largest comprehensive system of public higher education. The State University of New York's 64 campuses are divided into four categories, based on educational mission, types of academic op-

portunities available and degrees offered. SUNY offers students a wide diversity of educational options including shortterm vocational/technical courses, certificate, associate, and baccalaureate degree programs, graduate degrees and postdoctoral studies. SUNY provides access to almost every field of academic or professional study within the system via over 7,000 degree and certificate programs.

SUNY students represent the society that surrounds them. In May 2012, 24.4% of all enrolled students were minorities. While SUNY students are predominantly New York State residents, representing every one of the state's 62 counties, they also hail from every other state in the United States, the District of Columbia, four U.S. territories, and 160 nations. Total enrollment is over 467,000. Nearly 40% of New York State high school graduates choose SUNY and 99.8% of New York residents live within 30 miles of a SUNY campus. SUNY alumni number over 2.7 million graduates who reside 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. SUNY colleges and universities range from world-renowned community colleges, such as the Fashion Institute of Technology, to first-rate graduate schools and the nation's top veterinary school. The highly-regarded doctoral degree granting universities are home to top research programs and attract experts in a variety of fields. Students study in campus classrooms and laboratories or work from a distance through the SUNY Learning Network, which provides educational opportunities for an estimated 150,000 students through courses and degree and certificate programs.

The State University of New York is committed to providing quality education at an affordable price to New Yorkers and students from across the country and the world.

#### THE BOARD OF TRUSTEES

The Board of Trustees is the governing body of the State University of New York. It consists of 18 members, 15 of whom are appointed by the Governor, by and with consent of the New York State Senate. In addition, the President of the Student Assembly serves as student trustee and the Presidents of the University Faculty Senate and Faculty Council of Community Colleges serve as ex-officio trustees.

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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 mat-

- ters 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 Evalua-

# Consumer Complaint Procedure

tion does not conduct a judicial investigation 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 guide-

lines 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 PROBATION

A designation by the Dean of the appropriate School for a student with less than satisfactory academic progress. Students on academic probation 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 approxi-

mately four years of full-time study, generally 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 transcripted. 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:

- 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

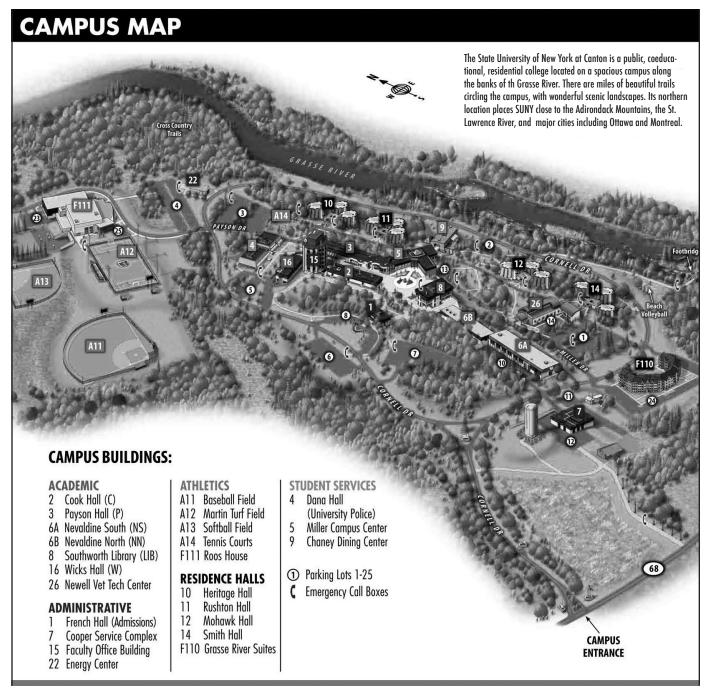
Official notification to the College that a student will not complete the semester. A form obtained at the Registrar's Office must be completed. Grades of "W" are recorded for all courses in progress at the time of the withdrawal.



A		$\mathbf{C}$		${f E}$	
Academic Calendar	2	Campus Map	197	Early Admission 1	12
Academic Development Courses	120	Campus Ministry Office	53	Early Childhood	39
Academic Information	42	Career Coaching, Employment		Early Childhood Courses	37
Academic Minors	106	& Continuing Education	50	Economics Courses	38
Academic Personnel	186	Casino Management (Minor)		Economics (Minor) 10	)7
Academic Support Services	45	Chemistry Courses	125	Education Courses	39
Accommodative Services	46	Churches	53	Educational Opportunity Program27, 4	í,
Accounting	79	Civil Courses	129	Electrical Construction and	
Accounting Courses	114	Civil Engineering Technology	84	Maintenance 10	
Accounting (Minor)	106	Civil and Environmental Technology	58	Electrical Courses	39
Accreditations	6	Clubs and Activities	51	Electrical Engineering Technology	)(
Administration Personnel	183	College Activities Board	52	Electrical Technology	52
Admissions Information	8	College Association	52	Emergency Management	ĵί
Air Conditioning Courses	115	College Foundation	190	Emergency Management Courses 13	3(
Air Conditioning Engineering Tech	80	College Mission and Goals	4	Engineering Science	)
Air Conditioning		Computer Courses	126	Engineering Science Courses	í
Maintenance & Repair	99	Computer Information Systems	85	English as a Second Language Courses 14	í(
Alternative and Renewable Energy		Construction Courses	129	English Courses	í2
Systems	56	Construction Technology: Management	86	Environmental Science and Forestry 11	[]
Alternative and Renewable Energy Systems Courses	117	Consumer Complaint Procedure	191	Environmental Science Courses	í(
·		Corrections (Minor)	106	Environmental Technology (Minor) 10	)7
Andreas de la Company		Counseling Center	47		
Anthropology Courses		Credit for Prior Learning	11	F	
Applied Physics (Minor)		Criminal Investigation	59	Facilities Operation Courses 17	78
Applied Psychology		Criminal Justice	87	Fees	2(
Applied Psychology Courses		Criminal Justice/Investigation Courses	155	Finance	54
Apprentice Training: Industrial Trades		Criminal Justice: Law Enforcement		Finance Courses	<del>1</del> 8
Art Courses		Leadership	60	Finance (Minor) 10	)7
Articulation Agreements		Criminal Justice: Law Enforcement	15/	Financial Assistance	23
Associated Colleges	6	Leadership Courses		First Year Experience courses	
Astronomy Courses		Criminal Justice Studies	100	Forest Technology 11	1 ]
Attendance, Conduct, Grades		_		French Course	
Automotive Courses		D		Funeral Services Administration	
Automotive Technology	82	Degree Programs Chart	7	Funeral Services Courses	
_		Dental Hygiene, B. Tech.			
В		Dental Hygiene, AAS		G	
Biology Courses		Dental Hygiene Courses		Geography Course	49
Business Administration		Developmental Studies		Geology Courses	
Business Administration-Transfer		Diversity Affairs Office	50	General Education Requirements	
Business Courses	121			General Technology	
				Glossary	

# Index

Graduation Requirements	41	Marketing Management (Minor)	108	S	
Graphic and Multimedia Design	66	Math/Science Tutoring & Learning Cntr	46	Scholarships	28
Graphic and Multimedia Design Courses	149	Mathematics Courses	162	Science Tutoring & Learning Center	46
		Mathematics (Minor)	108	School of Engineering Tech. Courses	173
Н		Mechanical Engineering Technology	95	Social Science Courses	
Health and Fitness Promotion	67	Mechanical Courses	164	Sociology Courses	173
Health and Fitness Promotion Courses	153	Mechanical Technology	74	Southworth Library Learning Commons.	45
Health Care Management	68			Spanish Courses	175
Health Care Management Courses		N		Speech Course	175
Health-Related Courses	154	Nursing, BS	75	Sports Management	76
Health Science Career Studies	102	Nursing, AAS	96	Sports Management Courses	175
Health Services	49	Nursing Courses	167	State University of New York	181
Heating and Plumbing Service	103			Student Government Association	52
History Courses	152	O		Student Judicial Affairs	52
Homeland Security	69	Online Learning	44	Student Support Services	45
Homeland Security Courses	156	Orientation Programs	47		
Homeland Security (Minor)	108	8	,	${f T}$	
Humanities Courses	155	Р		Telephones	49
		Physical Science Courses	168	Transcripts	39
I		Physical Therapist Assistant		Transfer Student Admission	10
Immunizations	49	Physical Therapy Assistant Courses		Tuition	20
Independent Study Course	155	Physics Courses		Tutoring Services	45
Individual Studies	93	Placement Testing			
Industrial Technology Management	70	Police Academy Program		$\mathbf{U}$	
Information Technology	71	Political Science Courses		University Police Department	52
Information Services	49	Powersports Courses		Upstate Medical University	
Insurance	50	Powersports Performance & Repair		Early Admissions Program (formerly GOLD Program)13,	111
International Students	10	Practical Nursing		(formerly GOLD Frogram)13,	111
		Practical Nursing Courses		3.7	
L		Psychology Courses	172	V	170
Legal Studies	72			Veterinary Assisting Courses	
Legal Studies Courses	160	R		Veterinary Courses	
Liberal Arts and Sciences:		Recreation and Athletics	51	Veterinary Science Technology	
General Studies		Refunds	22	Veterinary Services Management	
Library, Southworth		Religious Observances	53	Veterinary Technology	/ 0
Licensed Practical Nursing courses	161	Residential Life	47		
		Rights and Privacy Act	53	W	
M		ROTC	18	Women's Studies (Minor)	
Management Information	100			Women's Studies Courses	
Systems (Minor)				Writing Center	
Management Courses				Writing and Communication (Minor)	109
Management	13				



#### NON-DISCRIMINATION NOTICE

Pursuant to the State University of New York policy, SUNY Canton is committed to fostering a diverse community of outstanding faculty, staff, and students, as well as ensuring equal educational opportunity, employment, and access to services, programs, and activities, without regard to an individual's race, color, national origin, religion, creed, age, disability, sex, gender identity, gender expression, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, or criminal conviction. Employees, students, applicants, or other members of the campus community (including, but not limited to, vendors, visitors, and guests) may not be subjected to harassment that is prohibited by law or treated adversely or retaliated against based upon a protected characteristic.

The University's policy is in accordance with federal and state laws and regulations prohibiting discrimination and harassment. These laws include the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964 as Amended by the Equal Employment Opportunity Act of 1972, and the New York State Human Rights Law. These laws prohibit discrimination and harassment, including sexual harassment and sexual violence.

Inquiries regarding the application of Title IX and other laws, regulations, and policies prohibiting discrimination may be directed to the Title IX Coordinator/Affirmative Action Officer, Amanda Rowley, at (315) 386-7559 or at rowleya@canton.edu. Inquiries may also be directed to the United States Department of Education's Office for Civil Rights, 32 Old Slip 26th Floor, New York, NY 10005-2500; Tel. (646) 428-3800; email OCR.New York@ed.gov.