# College Catalog 2010-2011





Southern Maine Community College is the institution of choice for innovative and high-quality technical,transferable, cultural and community-based education.

ABOUT THE COLLEGE	4
Accreditation	4
Message from the President	4
Campus Locations	
South Portland Campus	
Bath Campus	
Midcoast Campus	
Satellite Locations	
Bonny Eagle Site	
Casco/Naples Site	
Portland Sites	
Windham Site	
Other Area Sites	
Mission Statement, Beliefs, and Vision	
SMCC Mission Statement	
Vision	
Student Profile	
Academic Calendar	
COLLEGE POLICIES	8
Institutional Policies	8
Family Education Rights and Privacy Act (FERPA)	8
Student Right to Know	
Student Handbook/Code of Conduct	9
Harassment, Sexual Harassment, Discrimination, & Affirmative Action	9
Academic Policies	10
Academic Standing	10
Student Evaluations of Courses	
Dean's List	
Academic Warning	10
Academic Probation	10
Academic Suspension	11
Academic Fresh Start	11
Graduation Requirements	11
Graduation with Honors	11
Second and Subsequent Degrees	12
Enrollment Status	
Attendance	12
Add/Drop	
Withdrawal from the College	13
Grades and Grading	
Computing of Grade Point Average	
No Show Grade	
Pass/Fail	
Course Withdrawal	
Auditing Courses	
Administrative Failure	
Incomplete Grades	
Repeating a Course	
Early Alerts/Scholastic Warnings	
Alternative Credit	
Transfer Credit	
Credit by Examination	
Credit through Experience	
Course Delivery	16

Honors Program	16
Writing Intensive Courses	
Distance Learning	
Internships/Externships	
Practicums	
Field Experience	
Independent Study	
Admissions Policies	17
Non-Degree Seeking Students	
Home-Schooled Students	
International Student Admissions	
Readmission	
Immunization Requirements	
Special Conditions of Admission, Enrollment, & Participation	
TUITION AND FEES	
Cost of Attendance	21
Tuition and Fees	
Statement of Financial Responsibility	
Native American Tuition Waiver Policy	
Residency Policy	
New England Regional Student Program	
Financial Aid	
COLLEGE PARTNERSHIPS & ARTICULATION	
Partnerships with Baccalaureate Institutions	
AdvantageU	
Greater Portland Alliance of Colleges and Universities	
Partnerships with Secondary Schools	
Secondary School Articulation	
STUDENT RESOURCES & SUPPORT	
Academic Achievement Center	
Library	29
Advising and Counseling	29
New Student Advising & Registration Sessions	29
Services for Students with Disabilities	30
Veterans Affairs	30
STUDENT LIFE	30
Student Handbook	
Residence Life	
Dining Services	
Campus Safety & Security	
Security Parking	
Regulations	
Student Activities and Athletics	
Athletics	
Center for Student Involvement & Leadership	
The Student Senate	
The Phi Theta Kappa International Honor Society	
Student Newspaper & Publications	
Skills-USA	
College Chorus	
ACADEMIC PROGRAMS	35
General Education Learning Outcomes	
Degree Programs	
Degrees Offered	

Program Information	39
Architectural & Engineering Design	39
Automotive Technology	40
Behavioral Health and Human Services	41
Biotechnology	42
Business Administration	43
Cardiovascular Technology	45
Computer Technology	46
Communications and New Media	47
Construction	
Criminal Justice	
Culinary Arts	
Dietetic Technology	
Early Childhood Education	
Electrical Engineering Technologies	
Emergency Medical Services/Paramedicine	
Fire Science Technology	
General Technology	
Heating, Air Conditioning, Refrigeration & Plumbing	
Heavy Equipment Operations	
Horticulture	
Integrated Manufacturing Technology	
Liberal Studies	
Lodging and Restaurant Management	
Marine Biology and Oceanography	
Medical Assisting	
Nursing	
Radiation TherapyRadiography	
Respiratory Therapy	
Surgical Technology	
Trade and Technical Occupations	
COURSE DESCRIPTIONS	
GOVERNANCE, ADMINISTRATION, FACULTY & STAFF	
Executive Staff	
Faculty	169
Staff	176
Academic Affairs Staff	176
Student Services Staff	177
Administrative Staff	178
Support Staff	180
Supervisory Staff	183
ADVISORY COMMITTEES	
Academic Program Advisory Committees	
Southern Maine Community College Boards/Committees	
Maine Community College System Board of Trustees	
SMCC Foundation Board	
SMCC Provident's Advisory Committee	
Rath Citizens Advisory Committee	

# ABOUT THE COLLEGE

# Accreditation

Southern Maine Community College is accredited by the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges (NEASC). SMCC was initially accredited by NEASC-CIHE in 2003 and was reaccredited in 2008. From 1974-2003 SMCC was accredited by the NEASC Commission on Technical and Career Institutions (NEASC-CTCI).

Founded in 1885, the New England Association of Schools & Colleges, Inc. (NEASC) is the nation's oldest regional accrediting association whose mission is the establishment and maintenance of high levels of education, from pre-kindergarten through the higher education doctoral level.

The NEASC Commission on Institutions of Higher Education (NEASC-CIHE) is the regional accrediting agency for over 200 colleges and universities in the six New England states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

# Message from the President

For over 60 years, Southern Maine Community College has had a rich history of educating and preparing Maine people for jobs vital to Maine's economic prosperity. In the last decade, the College has successfully transitioned into a high quality, comprehensive community college. With more than 40 degree and certificate programs and serving more than 6,200 students, we are the largest and most diverse institution of the Maine Community College System. As the fastest growing community college in New England, SMCC has literally changed the lives of hundreds of thousands of students.

The SMCC Midcoast Campus in Brunswick will continue this tradition as we also look at alternative education delivery methods to reach more Maine people, and meet the needs of our evolving economic climate. The campus will have a strong focus on technologies, such as advanced manufacturing, composite technology, applied engineering, and health programs such as nursing and health information technology/electronic medical records.

The foundation of the SMCC Midcoast Campus will be similar to the main campus in South Portland, offering quality courses and programs and excellent customer service in our effort to assist students with their needs for success at SMCC and beyond. Above all else our committed and talented faculty will maintain the quality of education that has been the cornerstone of SMCC for the past six decades.

The vision for SMCC is simple: offer high quality educational programs that lead to expanded opportunities for Maine people. For many students, SMCC degree and certificate programs are the roads to success in the workforce. Others want to pursue higher degrees in four-year colleges and universities. SMCC graduates have transferred to four-year institutions such as the University of Maine, University of Southern Maine, Bates College, Smith College, Mt. Holyoke College, St. Joseph's College, George Washington University, Tufts University, Wheelock College and many more.

As you learn about SMCC, I invite you to talk to a student or alum and see for yourself how SMCC has made a personal difference. Whether you choose to earn a certificate or an associate degree, SMCC can—and will—give you the keys to a better life.

Welcome.

James O. Ortiz, Ed.D.

President

# **Campus Locations**

# **South Portland Campus**

The main campus of Southern Maine Community College is located at 2 Fort Road, South Portland, Maine, close to Portland, the largest city in Maine, on a beautiful site overlooking Casco Bay. The College is one of the most picturesque points on the Maine coast, located on the site of the former Fort Preble. Many of the College buildings are historic structures that have been renovated to fulfill the educational mission of the College. The campus covers 80 acres and includes 45 buildings, including residence halls and dining accommodations, as well as an athletic field, a beach, a wharf, interesting military fortifications, and a lighthouse.

# **Bath Campus**

Southern Maine Community College at Bath is located in the Midcoast Center for Higher Education, 11 Park Street in Bath, sharing facilities with the University College. This campus was opened in January 2003 and contains modern classrooms, computer laboratories, science laboratories, faculty and student areas, and administrative offices. The campus allows the College to serve the mid-coast area, expanding educational opportunities to area residents and community businesses/agencies by offering a broad sequence of courses and programs. In 2008-2009, roughly 50 courses were offered each semester to serve the needs of approximately 700 students.

# **Midcoast Campus**

The SMCC Midcoast Campus is slated to begin offering classes in the fall of 2011 on the site for the former Brunswick Naval Air Station. This campus will offer programming in such diverse areas as health information technology/electronic medical records, nursing, composites technology, advanced manufacturing, heavy equipment operation and repair, and applied engineering. The Midcoast campus will feature a compliment of five buildings that will house these technology programs as well as administrative offices that will provide for complete services for students and businesses in the Midcoast Region.

# **Satellite Locations**

# **Bonny Eagle Site**

The Bonny Eagle site, serving the towns of Buxton, Hollis, Standish, and Limington, was established in the Fall of 2005 to bring higher education opportunities to the area. The development of this site saves local residents travel time and provides a range of general education classes close to home. MSAD #6 Adult and Community Education, at the Hollis Learning Center, serves as a local contact. Most classes are held at Bonny Eagle High School, 92 Sokokis Trail in Buxton, or Bonny Eagle Middle School, 700 Saco Road in Standish.

# Casco/Naples Site

The Southern Maine Community College site in Casco/Naples is located at 1437 Poland Spring Road, Casco, at the Crooked River Adult and Community Education Center. Regular college courses as well as community education classes are offered, providing educational opportunities to the western part of the region.

# **Portland Sites**

The Southern Maine Community College sites in Portland are located at Deering High School, 370 Stevens Avenue, and Casco Bay High School at 196 Allen Ave. The sites provide conveniently located higher education opportunities to local residents.

### Windham Site

The Windham site is located at the Adult Education Office at Windham High School, 406 Gray Road.

### Other Area Sites

Courses have been offered at various other schools or locations when there is a need. Recently, courses have been offered at Gorham High School, Sacopee Valley High School and Gray/New Gloucester High School.

# Mission Statement, Beliefs, and Vision

### SMCC Mission Statement

Southern Maine Community College empowers students to respond to a changing world and enhances economic and cultural development in Southern Maine by providing a variety of educational opportunities and partnerships.

### **Beliefs**

#### Access:

Southern Maine Community College believes that access to higher education is a fundamental value of democracy.

#### Responsiveness:

Southern Maine Community College believes that the College must be responsive to the changing world and to the educational, social, and cultural needs of our diverse student population and the State of Maine.

#### Collaboration:

Southern Maine Community College believes that collaboration within the College and with the broader community is essential in order to achieve the College's mission and goals.

### Personal Connections:

Southern Maine Community College believes that each individual deserves respect and encouragement and that the interaction among students, faculty and staff is an important part of the total educational experience.

### Vision

Southern Maine Community College: the institution of choice for innovative and high-quality technical, transferable, cultural and community-based education.

### Student Profile

6,261 credit students attended Southern Maine Community College in the Fall 2009 semester. Almost three percent of the student body is from out-of-state, and less than one percent is from foreign countries. In addition, during the period from July 1, 2009 through June 30, 2010, there were approximately 4,000 registrations in non-credit courses, seminars, workshops and various types of short-term training.

The ratio of full-time/part-time students is 50/50

The ratio of male/female students is 51/49 and

The average student age is 26

FALL SEMESTER 2010	DATE
Classes Begin	Monday, August 30
Drop/Add Period (16 week classes)*	August 30 – September 7 at 5 p.m
Labor Day - College Closed	Monday, September 6
Early Alert Reporting Due	Tuesday, September 28 at 5 p.m.
Columbus Day - College Closed	Monday, October 11
SMCC Open House	Saturday, October 16
Final Day to Submit Grades for Spring '10 Incompletes	Monday, October 25
Advising Week	November 8 - 12
Veteran's Day - College Closed	Thursday, November 11
Preregistration - Spring 2010	Monday, November 15 at 8 a.m.
College Forum	Tuesday, November 16
Last Day to Withdraw* (15-week Fall Courses)	Monday, November 22 at 5 p.m.
Thanksgiving Recess - College Closed	November 24 (3 p.m.) - 27
New Student Registration	Monday, November 29
Open Registration	Monday, December 13
Fall Classes End	Saturday, December 18
CDDING CEMECTED 2014	D ATTE
SPRING SEMESTER 2011	DATE
Faculty Professional Day	Firday, January 14
Martin Luther King Day - College Closed	Monday, January 17
Spring Classes Begin	Tuesday, January 18
Drop/Add Period (16 week classes)*	January 18 – 25 at 5 p.m.
College Forum	Thursday, January 20
Early Alert Reporting Due	Tuesday, February 15 at 5 p.m.
President's Day - College Closed	Monday, February 21
Preregistration - Summer 2011	Tuesday, February 22 at 8 a.m.
Final Day to submit Grades for Fall '10 Incompletes	Monday, March 14
Spring Break - No Classes	March 21 - 26
Open Registration - Summer 2011	Monday, March 21 at 8 a.m.
Advising Week - Fall 2011 Returning Students	April 4 - 8
College Forum	Thursday, April 7
SMCC Open House	Saturday, April 9
Preregistration - Fall 2011	Monday, April 11 at 8 a.m.
Patriot's Day - No Classes	Monday, April 18
Last Day to Withdraw* (15-week Spring Courses)	Tuesday, April 19 at 5 p.m.
Spring Classes End	Saturday, May 14
Commencement 2011	Sunday, May 22 at 2 p.m.
New Student Registration - Fall 2011	Monday, May 23
SUMMER SEMESTER 2011	DATE
Memorial Day - College Closed	Monday, May 30
Summer Classes Begin	Tuesday, May 31
Drop/Add Period (12 week classes)*	May 31 – June 2 at 5 p.m.
Independence Day - College Closed	Monday, July 4
Open Registration - Fall 2011	Tuesday, July 5
Last Day to Withdraw from Classes*	Monday, August 1 at 5 p.m.
Summer Classes End	Thursday, August 18
*Dana /Add and With drawal David de for about at the state of	and retail bear don as were leastly

<sup>\*</sup>Drop/Add and Withdrawal Periods for shorter term classes is pro-rated based on course length

# COLLEGE POLICIES

### Institutional Policies

### Family Education Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act, FERPA, (Section 438 of the General Education Provisions Act 20 USC § 1232g) affords students certain rights with respect to educational records. Students are informed of this right through this catalog and their Student Handbook. These are:

### Disclosure of Information from Records (Directory Information)

The College, unless requested not to do so by the student, may release directory information about individual students to anyone who inquires. The College reserves the right not to disclose such information to a person or entity when the College determines that such disclosure is not in the students' best interests and is not otherwise required by law. "Directory Information" is limited to name, address, date of enrollment, date of graduation, degree received, curriculum in which the student is enrolled, date of birth, participation in officially recognized activities and sports, weight and height of athletic team members, and official college honors such as Dean's List. Students who do not wish to have directory information released must submit a Request to Prevent Disclosure of Directory Information form.

### Non -Directory Information

No information, other than that contained in the directory, will be released without a student's written consent except when prior written consent is not required by FERPA. The College must disclose educational records without written consent of students to those federal and state government agencies and officials as provided by law. The College must also provide access to educational records to personnel within the College determined by the College to have legitimate educational interest; officials of other institutions in which a student seeks to enroll on condition that the issuing institution attempts to inform students of the disclosure, or makes such a transfer of information a stated institutional policy (this notification is to be considered such); organizations contributing to a student's financial aid or determining financial aid decisions concerning eligibility, amount, condition, and enforcement of the terms of such aid; organizations conducting studies to develop, validate, and administer predictive tests, to administer student aid programs or to improve instruction; accrediting organizations carrying out their function; parents of a student who have established that the student is a dependent based upon IRS code and provide a certified copy of the appropriate federal tax form; persons in compliance with a judicial order or lawfully issued subpoena provided that the College makes an attempt to notify the student; appropriate persons in an emergency to protect the health and safety of students or other persons.

### Inspection and Review of Records

Students have the right to inspect and review their education records. The College requires prior notice and reserves the right to deny access to confidential letters and recommendations associated with admission, employment/job placement, or honors, to other records to which the student has waived the rights of inspection, and to records containing information about more than one student.

### Challenge of Records

Students have the right to challenge records they believe to be inaccurate, incomplete, or incorrectly disseminated. If the outcome of the challenge is unsatisfactory, the student has the right to a hearing. If the outcome of the hearing is unsatisfactory, the student may submit an explanatory statement for inclusion in the educational record. Such a statement shall become part of the information contained in the educational record and disclosed with it.

### Records of Requests and Disclosures

The College will maintain a record of requests and disclosures of non-directory information. Records of requests shall include the names and addresses of the persons who requested the information and their legitimate interests in the information. Records of requests will not be maintained for those requests made by students for their own use; those disclosures made in response to written requests from the student; those made by school officials; and those specified in Directory Information.

### Right of Complaint

Students who believe that the College is not complying with the requirements of the Family Educational Rights and Privacy Act or regulations issued by the Department of Education to implement the Act may file complaints in writing to: The FERPA Office, U.S. Department of Education, 4000 Maryland Avenue, SW, Washington, DC 20202.

# Student Right to Know

As mandated by the Public Law 101-542, the Student Right-to-Know and Campus Security Act, as amended by Public Law 102-26, the Higher Education Technical Amendments of 1991, SMCC student completion information is available upon request from the Office of Institutional Research. Information concerning crimes on campus is available on the College website.

# Student Handbook/Code of Conduct

The Compass, SMCC's student handbook, is designed to introduce students to the many aspects of life at SMCC, including policies related to enrollment and student life, rules and regulations, and safety tips. The student handbook serves as a companion piece to the SMCC Catalog, which outlines the College's academic information, requirements, academic programs, course descriptions, and more. Students are expected to become familiar with both publications for a thorough understanding of College regulations.

# Harassment, Sexual Harassment, Discrimination, & Affirmative Action

### Harassment Prohibited

The College recognizes the dignity and right of individuals to work, learn, play and live in an environment which is free of substantial unlawful interference. Consequently, the College is committed to preventing and responding promptly and effectively to harassment of College students, employees, volunteers or visitors.

#### Sexual Harassment Prohibited

Sexual harassment is prohibited at the College under both state and federal laws and College and MCCS policies.

#### Non-Discrimination Notice

Southern Maine Community College does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation and/or preference, disability, or age or marital, parental or veteran's status in its programs and activities.

#### Affirmative Action

It is a goal of the College to act affirmatively to admit and serve students from traditionally under-represented groups. The College embraces the educational values served by a diverse student body. All applicants are evaluated for admission based on the criteria and standards established for College programs.

Inquiries about the College's compliance with, and policies on, these bases may be directed to any/all of the following:

Affirmative Action Officer Cates Building

2 Fort Road, South Portland, ME 04106

Telephone: 207-741-5798 Maine Relay Service: 800-457-1220

Fax: 207-741-5751

E-mail: dvickrey@smccme.edu Internet: www.smccme.edu United States Department of Education Office for Civil Rights

33 Arch Street, Suite 900 Boston, MA 02110

Telephone: 617-289-0111 TTY/TDD: 617-289-0063

Fax: 617-289-0150 E-mail: OCR.Boston@ed.gov

Internet:http://www.ed.gov/about/offices/list/ocr/i

ndex.html?src=oc

Maine Human Rights Commission (MHRC)

51 State House Station Augusta, ME 04333-0051 Telephone: 207-624-6050 TTY/TDD: 207-624-6064

Fax: 207-624-6063

Internet:

http://www.state.me.us/mhrc/index.shtml

Equal Employment Opportunity Commission 475 Government Center

Boston, MA 02203

Telephone: 617-565-3200 1-800-669-4000 TTY: 617-565-3204 1-800-669-6820

Fax: 617-565-3196

Internet: http://www.eeoc.gov/

### **Academic Policies**

# **Academic Standing**

To remain in good academic standing, students must complete 66 percent (66%) or more of the total number of credits attempted with a cumulative grade point average (Cum GPA) of at least 2.0 (see grading system) or higher. A course is not successfully completed with a grade of F, AF, I, W, or NS. Academic standing is calculated following each fall and spring semester.

### Student Evaluations of Courses

To assist the College in maintaining a high level of instructional quality, students are asked and strongly encouraged to submit course evaluations for each class that they are attending at SMCC.

### Dean's List

Students completing a minimum of 9 credit hours in courses graded A, B, or C, or P with a term grade point average (GPA) of at least 3.00 are named to the semester's Dean's List, provided that no grade lower than C was earned in any course that semester and the student is not on probation. Grades lower than C include C-, D+, D, F, W, NS, AF, and I. Only courses numbered 100 or higher are considered for Dean's List. Students who have asked to be excluded from the College's directory information, by law, cannot be included on the Dean's List published online or in local newspapers.

# Academic Warning

Students whose cumulative grade point average falls below 2.00 will be placed in Academic Warning status. Students on Academic Warning may not enroll in more than 15 credits and are encouraged to address study issues and to seek tutoring from the Academic Achievement Center.

### **Academic Probation**

Students who fail to meet the criterion of satisfactory academic progress by remaining in good standing will be placed on academic probation. Students placed on academic probation may enroll in no more than 12 credits each semester they are on probation.

Career Credits Attempted	Cumulative Grade Point Average
Below 14	No minimum
14-29	1.79
30 and above	2.00

Students who fail to attain both the required cumulative GPA and the appropriate completion rate remain on academic probation even if they achieve the appropriate semester GPA and complete 66 percent of the credits attempted in the probationary semester.

Students who remain on academic probation for three consecutive semesters will be automatically placed on academic suspension, although suspension can occur in any semester depending on performance.

# Academic Suspension

Students who have attempted 14 credits or more, regardless of whether that is in one semester or more than one, will be suspended if they fail to complete 66% of credits attempted and fail to maintain a minimum grade point average (1.79 for between 14-29 credits attempted; 2.00 for 30 or more credits attempted). There is no probationary period for students once the 14-credit threshold is reached if a student fails to maintain course completion and G.P.A. requirements.

In addition, students will be suspended if, during a probationary semester, they (a) fail to achieve a semester GPA of 1.79 for 14 to 30 credits, or (b) fail to achieve a semester GPA of 2.00 for 30 or more credits attempted.

Suspended students are required to discontinue their enrollment for a period of one semester before requesting reinstatement to the College.

### **Academic Fresh Start**

Academic Fresh Start is a one-time opportunity for qualifying students to have prior grades excluded from their grade point average (GPA) when they resume work toward a degree at SMCC after an extended absence. All prior grades will appear on official transcripts. Only grades earned after the Fresh Start is granted will be used in calculating a new GPA. Only fresh start grades of C or better will count toward degree requirements.

#### Conditions:

A student can only be granted Fresh Start once.

Fresh Start cannot be granted if a student has earned a degree, diploma, or certificate from SMCC.

The student must not have been enrolled in credit-based course work at SMCC or any other college or university for a minimum of three consecutive years prior to readmission to SMCC.

The student must have attempted fewer than 30 credits at SMCC prior to readmission to SMCC.

After readmission, the student must complete 12 semester credits at SMCC with a minimum cumulative GPA of 2.0 and credit completion ration of at least 67%.

Students who meet all conditions must contact their academic advisor and complete the Fresh Start application.

Students must submit the application to Enrollment Services before earning 24 new credits.

At least 50% of the degree or certificate requirements must be completed after readmission.

# **Graduation Requirements**

Southern Maine Community College students must meet the following criteria in order to be eligible to graduate from a degree or certificate program:

Students must successfully complete all courses in their associate degree or certificate program.

All candidates for graduation must attain a 2.0 minimum cumulative grade point average (GPA).

All associate degree students must complete at least 15 of their credit hours directly through the College.

Certificate students must complete at least 9 of their credit hours directly through the College.

The College will not award degrees and certificates until all financial obligations are met.

# **Graduation with Honors**

Southern Maine Community College recognizes students who meet certain qualifications during the annual commencement ceremony. The following list of honor levels describes minimum criteria:

### **High Honors**

Students who have completed degree requirements with a cumulative grade point average of 3.75 or higher.

#### Honors

Students who have completed degree requirements with a cumulative grade point average of 3.50-3.7499.

#### Highest GPA in Program

Students who have completed degree requirements with the highest cumulative grade point average of any student in their degree or certificate program, provided the GPA is 3.5 or higher.

# **Second and Subsequent Degrees**

A student may apply to earn additional associate degrees. To qualify, a student must complete the required courses for each degree, resulting in a minimum of fifteen credits beyond the first degree. A student may not earn more than one associate in arts in Liberal Studies degree, regardless of the multiple available concentrations.

### **Enrollment Status**

### Full-time/Part-time Status

Full-time status for financial aid, insurance discounts, etc., is defined as 12 or more credit hours. Fewer than 12 is considered part-time. Credits awarded for transfer coursework, work experience, certification, high school articulation, exemptions, audited courses, and challenge exams, including CLEP and AP, are not considered when determining full-time status.

#### Maximum Credit Load

Southern Maine Community College restricts student enrollment to no more than 18 credits in a single semester and 12 credits during the summer term.

### Attendance

Students are expected to attend all regularly scheduled classes and laboratory sessions. Students who are having difficulties with absenteeism must contact their instructor as soon as possible to discuss the steps they must take to succeed in the remaining weeks of the term.

#### Classroom Attendance

Faculty members have authority to establish attendance standards appropriate to their course. These standards will be clearly stated in the course syllabus.

#### Student-Faculty Communication

Three or more consecutive absences from regular class meetings with no communication between student and instructor must be reported to Enrollment Services and the student will be assigned a grade of "AF" (Administrative Failure).

A family emergency or personal illness may cause a student's extended absence. The student or a family member may call the Associate Dean of Students' office to request that all instructors be notified of the emergency or to request other assistance as needed. Upon return, the student is responsible for making arrangements with each instructor to complete all course requirements; however, in some cases it may not be possible to successfully complete the course.

SMCC recognizes that students from a variety of established religious traditions have special days of observance during the academic year. Faculty members, when notified by students at least two weeks prior to an intended absence for religious observance, are encouraged to consider such notice as it fits within the confines of their attendance policy stated on the course syllabus. Students who have notified their faculty members of intended absence for religious observation are expected to learn what assignments and/or tests are due or will be assigned during an absence and to arrange, whenever possible, alternate times for fulfilling these requirements.

### Class Attendance – Extracurricular and College-Sanctioned Activities

The primary responsibility of students attending Southern Maine Community College is to meet their individual academic goals successfully. However, the administration, staff and faculty fully support and encourage student participation in those extracurricular activities that enhance the college experience. Such activities can include participation on athletic teams, course field trips, attendance at outstanding speaker series, participation in student government, participation in Phi Theta Kappa, involvement in service events, and other activities.

Students who engage in any college or course-sanctioned or extracurricular activity, must adhere to the procedure outlined in the Student Handbook regarding notification of faculty and completion of coursework.

If the students properly communicate the upcoming absences to the faculty, faculty members are asked not to penalize students in their classes for absences due to college-sanctioned or extracurricular activities. However, individual faculty members have final discretion concerning allowing class makeup.

Faculty advisors, professors, and coaches (or the athletic director) who sponsor such extracurricular activities shall, to the best of their abilities, send a list of participants to the community or the affected faculty in advance of the scheduled event.

# Add/Drop

Students may alter their schedules by adding or dropping courses during the one-week "add/drop" period at the beginning of the fall and spring semesters and the first three days of summer sessions. Students who officially drop during this timeframe receive a 100% refund of the tuition and technology fees for that course. Please note that any course that meets for less than the traditional semester length, i.e. 15 weeks, has a pro-rated drop/add period. There is no refund for non-attendance.

# Withdrawal from the College

A student withdrawing from the College prior to the twelfth week of classes (pro-rated for shorter courses) will be assigned grades of W in all courses. If a student withdraws from school after the twelfth week, the student's instructors will assign letter grades.

A student who has discontinued his/her enrollment at the college for a total of one full calendar year will be officially withdrawn from the college. If the student wishes to return to the college after being withdrawn, the student will be expected to follow the program curriculum for the academic year in which the readmission becomes effective.

# **Grades and Grading**

Grades at Southern Maine Community College are assigned by letters representing levels of achievement. The basis for determining a grade is the relative extent to which the student has met objectives of the course. Letter grades signify the following:

Grades	Quality Points/Credit	Interpretation
А	4.00	93-100
A-	3.67	90-92
B+	3.33	87-89
В	3.00	83-86
B-	2.67	80-82
C+	2.33	77-79
С	2.00	73-76
C-	1.67	70-72
D+	1.33	67-69
D	1.00	63-66
F	0.00	Failure
Р	None	Equivalent to a C (2.0) or better

AF	0.00	designating unofficial withdrawal (failure to continue attending class)
1	None	Incomplete
W	None	Official withdrawal from a course prior to the 13 <sup>th</sup> week of classes; no credit earned
NS	None	Failure to appear for any session of a class for which you have registered.

Advairiation failure resigned at the discustion of the instruction

# **Computing of Grade Point Average**

To compute the grade point average for a semester, first multiply the grade points earned in each course by the number of credit hours assigned to that course. The resulting product is the number of quality points for that course. Then divide the total number of quality points earned during the semester by the total number of credits attempted in that semester.

EXAMPLE FOR DETERMINING GRADE POINT AVERAGE:

Course	Credits Attempted	Grade	Grade Points	Quality Points Earned
MATH140	3	B+	3.33	9.99
BIOL-100	4	С	2.00	8.00
ENGL-100	3	B-	2.67	8.01
SOCI-100	3	F	0.00	0.00
TOTAL	13			26.00
				GPA = 2.000

To compute the cumulative grade point average, divide the total quality points earned by the total credits attempted in all semesters. Note: Pass/Fail and Repeated courses and credits granted through CLEP or AP examinations, work experience, or transfer are not to be considered when computing grade point averages.

### **No Show Grade**

A student who enrolls in a class, and pays any part of the tuition (even if through pending financial aid or another agency), but doesn't appear in class will receive a grade of NS (no show) on the faculty class list and their transcript. They will receive no reimbursement for the course or fees, the grade will be treated in the same manner as a withdrawal for the purpose of determining the number of credits attempted, and the grade will contribute to any determination of probation or suspension status.

# Pass/Fail

A Pass (P) grade earned in a course that is graded pass/fail is equivalent to a C (2.0) or better.

### **Course Withdrawal**

A student may withdraw from a course only during the semester in which s/he is registered for that course. The withdrawal period is the second through twelfth week of the fall and spring semesters and the second through ninth week of twelve-week summer courses. This period is pro-rated for shorter length courses (75% of the course length). The designation "W" will appear on the transcript after a student has officially withdrawn. A course withdrawal is an uncompleted course and may adversely affect financial aid eligibility. Failure to attend or ceasing to attend class does not constitute withdrawal from the course. There is no refund associated with a withdrawal.

# **Auditing Courses**

Students planning to audit a course are required to pay full tuition and fees. The request to audit may be made no later than add/drop week. Students auditing a course will not receive a letter grade or credit for the course and may not count course credits toward full-time status or graduation requirements.

### Administrative Failure

Administrative Failure (a final grade of AF) identifies students who have stopped attending class and who have had no contact with the faculty member for a period during which the class has met three or more times. At their discretion, faculty may reinstate students who resume attending after the grade has been assigned.

# **Incomplete Grades**

A faculty member has the option of granting a grade of "incomplete" when an extraordinary event occurring late in the semester prevents a student from completing all required assignments. The purpose of an incomplete grade is to give students an opportunity to earn the grade they would otherwise have received had the event not occurred. The purpose is NOT to give students more time to improve their grade.

#### Guidelines:

Each instructor has full discretion in granting an incomplete grade, and the student cannot appeal the decision.

A student can request an incomplete grade after the end of the 12-week withdrawal period.

The student must be able to demonstrate substantial progress toward completing all required work at the time an incomplete grade is requested.

The student must be earning at least a C average in the course at the end of the withdrawal period.

The student must have met the attendance requirements for the course prior to the event that the request is based on.

Work submitted to satisfy an incomplete grade must meet the same standards as other course work.

# Repeating a Course

A course may be attempted a maximum of three times (initial enrollment and two repeat attempts). For credit courses, the last grade (regardless of whether that grade is better or worse) on any course repeated will be the grade used in computing the cumulative Grade Point Average (GPA), and all grades will remain on the student's record. The repeated course will count only once toward graduation requirements, provided the grade satisfies requirements.

# Early Alerts/Scholastic Warnings

Warnings of unsatisfactory performance in individual courses are distributed after the fourth week of each semester for all students whose instructors indicate.

# Alternative Credit

### Transfer Credit

Courses in which a student has received a grade of C or better are accepted in transfer from regionally accredited institutions ("C-" grades are not acceptable). There is no limit on the age of courses accepted for transfer credit. Courses must be comparable to those offered at SMCC in order to meet the requirements of the student's program. Transfer is determined by the appropriate academic department and administered by the Enrollment Services Center.

Students seeking an associate degree must complete at least 15 of their credit hours directly through the College. Students seeking a certificate must complete at least 9 of their credit hours directly through the College. A request for transfer credit requires submission of an official transcript from the other college. Transcripts for incoming freshmen should be on file in Enrollment Services 30 days prior to the semester for which consideration for transfer credit is to be given. Transcripts from other institutions submitted to SMCC will

become the property of the College and will not be reproduced and/or mailed to other institutions. A student's grade point average at SMCC will not reflect grades in courses transferred from other institutions.

Students who wish to transfer credits from SMCC to other colleges should note that the decision to accept credits is determined entirely by the institution to which the student is transferring, although most area colleges readily accept most applicable SMCC credits.

# Credit by Examination

Credit for College Level Examination Program (CLEP) General Exams and selected Subject Exams will be granted in applicable subject areas. No more than 30 credits may be granted. A minimum acceptable score of 50 is recognized, as recommended by the American Council on Education (ACE), on all exams.

Students with documented skills and the permission of the Department Chair may qualify to sit for challenge exams in selected courses in their programs. Students must register and pay a challenge exam fee for the course. Challenge exam credits do not count toward full-time status for financial aid and the Veterans Administration. No grade is assigned, and the exam does not calculate into grade point average.

Credit is granted for Advanced Placement (AP) courses/exams completed with scores of "3" or higher for which there are comparable courses at SMCC.

# **Credit through Experience**

Students may be exempted from selected courses or receive "work experience" credit based on documented work experience and approval of the Department Chair and the Registrar. Work experience can be used toward meeting graduation requirements. Credits are not likely to be transferable.

# **Course Delivery**

# **Honors Program**

The Honors program at SMCC offers students in every discipline the opportunity to study and learn in an academically challenging and enriching learning environment. Honors students receive special recognition at graduation, and "SMCC Honors Program Scholar" designation on official transcripts. The Honors program is affiliated with the National Collegiate Honors Council (NCHC) and the Northeast Regional NCHC.

#### **Program Requirements:**

Maintain a 3.30 cumulative GPA. If cumulative GPA drops, honors students are allowed one probationary semester to continue in the program and raise their cumulative average.

Maintain a minimum "B" in all designated Honors courses.

Complete the Honors Seminar.

Complete at least two courses that include an Honors Component.

Complete an Honors Project and present at an appropriate seminar or conference, such as Thinking Matters.

# Writing Intensive Courses

A number of courses at Southern Maine Community College are designated as writing-intensive, indicated with a "WI" credit type on the official transcript. Courses with this designation require ENGL-100, English Composition, as a prerequisite and include student writing and its improvement as primary course objectives.

# **Distance Learning**

The Distance Learning Program at Southern Maine Community College is an effort to broaden the scope of course content offered via the Internet and to create an environment of creativity and support for faculty members wishing to teach or enhance their courses by offering material online. The ultimate goal of this program is to offer a wide array of individual courses and programs to students enrolled at SMCC who are interested in interactive learning. Many courses use the Internet to enhance the traditional classroom education experience. A wide range of disciplines offer courses on-line, which allows both traditional and non-traditional students the opportunity to pursue a secondary education that may not have been available because of scheduling or distance-related difficulties.

# Internships/Externships

An Internship places students with a mentor in an on-the-job learning experience. It is practice oriented and requires that students apply prior mastery of theoretical work and basic skills. An Internship should provide mentored apprenticeship experience in a broad range of functions of the career area and is not simply an entry-level job. An internship is usually the culminating experience in the students' program of study.

Academic credit is based on the number of hours of job experience. Regular work hours are to be maintained. A minimum of 40 clock hours of directed on-the-job time is required for each semester hour of credit; often more time is devoted to the internship than that required for minimum credit. Regular tuition rates are charged based on the amount of credit.

### **Practicums**

A Practicum places students in a practice learning situation. It provides students with supervised observation of a relevant career or profession through exposure to the functioning of an organization as a participant in its operations. Students are encouraged to relate and interpret their experiences through frequent conferences with a faculty supervisor, projects, and assignments. A practicum is exploratory rather than culminating.

Academic credit is based on the number of hours of experience. A minimum of 40 clock hours of directed work is required for each semester hour credit.

# Field Experience

Some courses provide students with the opportunity to participate in field experiences. Field experiences place students in a learning environment in the field observing and assisting professionals at work with selected tasks as an introduction to the profession.

The instructor in a course that requires such an experience places students in field experiences. Assignments related to the field experience are part of the overall course evaluation.

# **Independent Study**

A student may request an opportunity for independent study in an area not covered in normal course offerings. All requests must be in writing and have prior approval of the Instructor, Department Chair, and Academic Dean.

### **Admissions Policies**

All students applying to degree or certificate programs are required to take the ACCUPLACER® placement tests in reading, writing, and mathematics unless otherwise exempt. The purpose of the ACCUPLACER® is to determine ability to perform college-level work and assess the levels at which students will begin their study. Based upon test results, the College may prescribe developmental courses or limit a student's enrollment in an effort to enhance that student's ability to succeed. Applicants to health and technical programs must comply with program-specific entrance requirements and application deadlines.

SMCC maintains a rolling admissions policy for most programs allowing candidates to apply and be considered for acceptance throughout the year. Due to competition for acceptance to some programs, particularly health programs, early application (at least 6 months prior to the fall) is encouraged.

# **Non-Degree Seeking Students**

To enroll in classes as a non-degree student, students should refer to the Academic Calendar for open registration dates. In order to take an English or math course, or a course with an English or math prerequisite, students must take the ACCUPLACER® placement test unless otherwise exempt.

### Home-Schooled Students

Home-schooled students must submit all requested documents, and are encouraged to submit official results from the General Equivalency Diploma (GED) to certify the completion of high school or its equivalent. In lieu of this credential, the minimum ACCUPLACER® scores will satisfy the requirement. The ACCUPLACER®, produced by the College Board, is a recognized ability to benefit test. A student must achieve the following minimums to qualify:

Reading Comprehension 55

Sentence Skills 60

Numerical Math 34

The College reserves the right to request the high school transcript with a listing and description of coursework completed and competency level achieved.

### International Student Admissions

International students planning to attend SMCC on an F-1 student visa must submit documented proof of completion of their secondary education and must demonstrate proficiency in English if English is not their first language. Students attending on an F-1 visa must enroll in a degree program and attend full-time fall and spring semesters. International applicants must submit all required application materials to Enrollment Services by July 1 for the next September semester, November 20 for the next January semester.

Students whose first language is not English must take the Test of English as a Foreign Language (TOEFL) at least six months prior to the intended term of enrollment. Test scores more than two years old will not be accepted. Information and application forms may be obtained by writing to TOEFL, P.O. Box 899, Princeton, New Jersey 08541 or by visiting the TOEFL website at http://w ww.toefl.org.

If applying from within the U.S., the applicant who is unable to provide TOEFL scores must have language ability assessed through the ACCUPLACER® placement test administered at SMCC. Arrangements to take the ACCUPLACER® placement test on-line may be made through SMCC Enrollment Services.

SMCC is authorized to provide international students admitted to the College with the I-20 form needed to apply to the U.S. Customs and Immigration for an F-1 student visa. Before the College can create an I-20, the student must satisfy the following admission requirements:

Complete an application and pay a non-refundable \$20.00 application fee

Submit official high school transcripts for all years attended, and proof of completion of secondary school

Provide a Declaration of Finance form with supporting materials, which includes an affidavit of support or notarized letter from a sponsor documenting that he/she will be responsible for the student's educational and living expenses for one year and/or an official bank statement showing sufficient funds in a bank account to cover total education and living expenses for one year. This amount must be a minimum of \$19,043.00 in U.S. dollars

Submit TOEFL with a score of 500 or better in paper version, 173 or better in computerized version, or 61 or better in the internet-based version, or take the ACCUPLACER® placement exam to demonstrate English language proficiency.

All documents submitted must be original. If documents are not in English, an official translation must be attached. Please have all documents, such as high school transcripts, TOEFL scores, Declaration of Finance forms, and other related documents sent to the Enrollment Services Center at Southern Maine Community College. Procedures and regulations of the U.S. Department of Homeland Security that pertain to international student and visitors visas are also available in the Enrollment Services Office.

### Readmission

Students in good standing who have withdrawn from Southern Maine Community College voluntarily and who wish to return must submit a written request. If the period of absence is less than five academic years, withdrawn students in good standing may complete a request for readmission form available in Enrollment Services. If a student wishes to return after an absence of more than 5 years, he/she must reapply to the college.

Students are expected to complete program requirements listed in the catalog in effect for the year they are officially admitted to the college. If readmitted after more than one year, students must meet the academic degree requirements listed in the catalog under which they are readmitted. In the case of readmission, there is no guarantee that the student's desired program will be available.

Students who have been dismissed from the college for academic or disciplinary reasons and who wish to return must should refer to the section in the catalog titled "Reinstatement from Suspension".

# **Immunization Requirements**

All matriculated students at SMCC must comply with all applicable immunization requirements as determined by Maine State Law.

Immunization Requirements (Non Health Science majors)

All students must have proof of diphtheria/tetanus every ten years. In addition, all non health science programs require proof of one (1) dose of the Measles and Rubella vaccine and two (2) doses of the Mumps vaccine OR proof of immunity by a blood titer. All non health science students must provide evidence of immunizations to the Enrollment Services Center. Students who do not meet the requirements may not attend classes.

Immunization Requirements (Health Science majors)

In addition to the immunization requirement listed above, students accepted to a Health Science program (Cardiovascular, Dietetic Technology, Medical Assisting, Nursing, Paramedicine, Radiation Therapy, Radiography, and Respiratory) have **additional requirements** such as immunizations, background checks, and drug screening. All requirements must be submitted for review to American DataBank. Please visit <a href="www.smccme.edu/ADB">www.smccme.edu/ADB</a> for details. Students who do not meet the requirements may not attend classes.

Health Science immunizations include:

Proof of immunity to Hepatitis B by blood titer.

Two doses of MMR vaccine OR proof of immunity by blood titer.

Proof of immunity by blood titer to Varicella (Chicken Pox) OR two doses of the Varicella Vaccine if non-immune.

Tetanus/Diphtheria immunization current within the past ten years.

Negative PPD result (Tuberculosis). Annually updated results are required.

Please note, upon entry of immunization information into your student record, the documentation you or your health care provider submits will be confidentially destroyed. Please keep a copy for your personal records.

# Special Conditions of Admission, Enrollment, & Participation

#### A. Introduction

The colleges of the MCCS offer education and services to students under a process of modified open admissions. Typically, this process enables those students who meet the stated academic criteria for program or college admissions to attend and access the full offerings of the college. In some circumstances, however, a student's personal experiences may affect a student's admission, enrollment or participation in a college's various offerings. The purpose of this policy is to express the authority of the colleges to handle such circumstances.

### B. Definitions

For purposes of this policy, the following terms have the following meanings.

"Admission" means entry into a college, off-campus site, program or course;

"Circumstances warranting special conditions" or "special circumstances" mean those acts that raise reasonable concerns for community safety and community order. They typically involve prior personal misconduct that demonstrates a diminished reliability to comply with the reasonable rules and regulations of the college, and/or a greater likelihood of risk of harm to persons or property. Such circumstances often include, but are not limited to, a:

Criminal conviction;

Condition of bail, probation, restraining order or other judicial or administrative order;

Pending arrest, indictment or other criminal charge;

Report or recommendation of a law enforcement, probation or parole officer that relates to the risks of harm or disruption that a student may present;

Report or recommendation of a mental health professional that relates to the risks of harm or disruption that a student may present; or

Civil litigation whose allegations raise like concerns for a college.

A "condition" can include either exclusion, restriction or both.

"Enrollment" includes enrollment in on-campus and online courses;

"Participation" means involvement in any college service or activity including, for example, access to housing, financial aid, athletics or extra-curricular activities, as well as a general freedom of movement around campus.

"Student" includes an applicant for admission, an admitted student, and an enrolled student.

### C. Completed vs. Evolving Matters

This policy applies both to those special circumstances that have been completed and those that are still evolving. For example, this policy applies to instances when a student has been criminally convicted and to instances when a student is facing criminal charges not yet proven. While this policy recognizes the presumption of innocence that attaches to the latter, this policy also recognizes, and adopts here the equivalent of, the prudent interim approach of courts in imposing reasonable restrictions on the individual until the process for finding guilt, innocence or other disposition is complete.

### D. Coordination of this Policy with the Student Code of Conduct

When the student's underlying personal conduct at issue is subject to the jurisdiction of the MCCS Student Code of Conduct (for example, the underlying misconduct at issue occurs on college property or is related to a college event, and is also subject to criminal prosecution), the procedures of that Code and the substantive guidance of this policy shall be used. When the underlying conduct is not subject to that Code (for example, the underlying misconduct at issue does not occur on college property or in relation to a college event but is still subject to criminal prosecution), the procedures and substantive guidance of this policy shall be used.

#### E. Authority to Exclude or Limit

A college may exclude a student or limit a student's admission, enrollment or participation to the extent that a student's special circumstance diminishes the student's:

Likelihood of success in a program for which admission is competitive;

Ability to be placed in a required internship or clinical experience;

Ability to qualify for a professional license after graduation;

Ability to qualify for financial aid, especially federal financial aid if there is a drug-related conviction;

Compatibility for placement in a college residence hall;

Trustworthiness for on-campus employment;

Reliability to comply with the reasonable rules and regulations of the college; and

Reliability not to present a greater likelihood of risk of harm to persons or property.

#### F. Determining Whether to Exclude or Limit a Student

In determining whether to apply any conditions to a student with a special circumstance, a college should:

Identify the specific nature of the student's special circumstance. For example, a college should consider the following:

Whether the conduct underlying the special circumstance was admitted or proven, or is not yet admitted or proven;

When and how recently the conduct was committed or alleged to be committed, and whether the student was a juvenile or adult at the time;

Whether the conduct was against a person or property; violent or passive; and intentional, reckless, negligent or grossly negligent;

Whether the harm actually or allegedly caused was minor and temporary or serious and permanent;

Whether the student acknowledged the student's responsibility by plea, or contested by trial and/or appeal;

What punishment, if any, was imposed on the student; whether that punishment was satisfactorily completed; whether the student is on bail, probation or parole, and, if so, the terms and conditions thereof; and the perceived degree to which the student has been rehabilitated; and

Any other factor that is relevant and material.

Provide the student with an opportunity to be heard before making a decision;

Consult, as appropriate, with the MCCS General Counsel;

Weigh the student's circumstances against the college's interests in, for example, those issues addressed in *Section E* above and determine the rational relationship between the facts of a particular student's case and the college's interests in excluding or limiting the student; and

Impose those conditions that by amount, scope and duration are reasonable under the particular circumstances.

# TUITION AND FEES

# Cost of Attendance

### **Tuition and Fees**

The Board of Trustees sets tuition annually for all Maine community colleges.

**Tuition** 

Maine Residents: \$84.00 per credit hour Non-Residents: \$168.00 per credit hour

New England Regional: \$126.00 per credit hour, qualified students from other New England States\*\*

Senior Citizens: fees only, age 65+, Maine Residents\*

\*must provide proof of age & residence to Bursar

\*\*refer to the catalog entry New England Regional Student Program

Application Fee (non-refundable, paid once with the initial application) \$20.00

Comprehensive Fee \$8.40 per credit hour

Course Fee \$8.40 per credit hour

Lab/Tech Fee \$16.80 per credit hour

Document Processing Fee \$3.00 per credit hour

Information Access Fee \$2.50 per credit hour

Academic Services Fee \$1.00 per credit hour

Student Activity Fee \$25.00 per semester, not charged during Summer term

### Parking Permit

Fall Parking Permit: \$30.00 (covers August 30, 2010 through December, 2010)

Spring Parking Permit: \$30.00 (covers January, 2011 through May, 2011)

Summer Parking Permit: \$15.00 (covers May 16, 2011 through August 29, 2011)

Students may waive parking charges each semester by completing and submitting the online waiver attesting that they do not bring a vehicle onto the campus.

#### Accident and Sickness Insurance Plan

\$368/twelve-month plan, beginning August 30, 2010; \$246 nine-month plan beginning January 18, 2011

Students who are enrolled in a comparable health insurance plan can waive this plan by completing the online waiver form with the Insurance Company.

### Liability Insurance

\$15.00 to \$149.00 An annual charge to students in Health Sciences, Behavioral Health, Early Childhood, and Paramedicine programs for participation in clinical and practicum settings.

### Background Checks and Immunization Tracking

Charged to students in Health Sciences, Behavioral Health, Early Childhood, and Paramedicine programs for participation in clinical and practicum settings.

### Testing Fees

Charged for certain classes that have specific testing or certification requirements

#### Room Charges

Per Student \$4,960 per year; (\$2,480 per semester)

Cable/Internet Services Fee per student \$266 per year; \$133 per semester

#### Meals

\$3,000 per year; \$1,500 per semester

All on-campus residence hall students are required to purchase a meal plan. The Dining Hall serves three meals per day Monday through Friday and two meals per day on the weekend. Sandwiches, soups, salads, bottled drinks and coffee are also available in the Café located in the Campus Center, which is open most of the day Monday through Friday. Unused meals or flex dollars purchased as part of a meal plan are forfeited if not used in the semester in which they were purchased.

### Beacon Bucks (for food purchases in the Dining Hall and Café)

All students may purchase declining balance/debit cards in any denomination, with a minimum initial payment of \$50. Beacon Bucks remain active as long as the student remains continuously enrolled and then are forfeited.

# Statement of Financial Responsibility

By enrolling in classes at Southern Maine Community College, students agree to pay all charges incurred as a result of that enrollment including any late penalties assessed due to failure to pay. Students should also understand that they are responsible for any collection costs assessed should the services of a collections agency be required.

Students are responsible for the status of their accounts. Please contact the Student Billing Office immediately if you have any questions or concerns about your account or if there have been any changes in any of your payment arrangements.

For further information on student billing procedures, please refer to the Paying for College section of our website.

# **Native American Tuition Waiver Policy**

Southern Maine Community College waives all or a portion of tuition charges for matriculated students who are Maine residents and document their membership or ancestry in a Maine-based Native American tribe.

### Waiver Eligibility

To qualify for an SMCC Native American tuition waiver, the student must meet the following eligibility criteria:

**Tribal Membership or Ancestry:** The student must be included on the current tribal census or have at least one parent or grandparent included on the current tribal census of the Passamaquoddy Tribe, the Penobscot Nation, the Houlton Band of Maliseet or Aroostook Band of Micmac.

Maine Residency: The student must meet SMCC's criteria to qualify for in-state tuition charges.

**Enrollment:** The student must be accepted into a degree or certificate program and enrolled in credit-bearing courses at SMCC. The student must remain in good academic standing as defined by the college and maintain Satisfactory Academic Progress as defined by Title IV Federal financial aid regulations.

**SMCC Native American Waiver Application:** The student must complete and submit a "SMCC Native American Tuition Waiver Application" to the SMCC Financial Aid Office. Once eligibility is established, re-application is not necessary.

**Financial Aid Application:** Applicants for the Native American Waiver must complete the Free Application for Federal Student Aid (FAFSA) annually as soon as possible after January 1 and provide the documents required for determining aid eligibility. Applicants must meet the general eligibility requirements for receiving Federal student aid.

**Programs taught at other campuses:** Students enrolled in the Fire Science program taking classes at Eastern Maine Community College or the Criminal Justice program taking classes at Washington County Community College must apply for the Native American Waiver at those respective colleges and are subject to their waiver policies.

#### Waiver Amount

The waiver is equal to in-state tuition charged to the student in a semester less any Federal or state need-based grants or scholarships for which the student qualifies. Other restrictions apply:

Charges other than tuition are not waived.

Tuition is not waived for courses with a grade of NS (no show).

Summer session tuition is waived only for students in majors which require summer attendance:

Automotive Technology – AAS

Cardiovascular Technology - AS

EMS/Paramedicine - AS

Radiation Therapy – AS

Respiratory Therapy - AS

Radiography - AS

#### Duration of Eligibility

Eligibility for the waiver ends after the student has earned one degree or one certificate or after the student has attempted 90 credits at SMCC, regardless of whether or not the student has earned a credential.

# **Residency Policy**

A student is classified as a Maine resident or non-resident for tuition purposes at the time of admission to the college. No student, once having been identified as a non-resident student, is eligible for resident classification unless he/she has been a bonafide domiciliary of the state for at least one year immediately prior to registration for the term for which resident status is claimed. If the student is enrolled for a full academic program, as defined by the College, it will be assumed that the student is in Maine for educational purposes and that the student is not in Maine to establish a domicile as a permanent resident; thus, the burden will be on the student to prove that s/he has established a Maine domicile by the time of such registration. The domicile of a student who is claimed as a dependent for tax purposes follows that of the parents or legally appointed guardian of the student.

If a student classified as a non-resident marries a person who is domiciled in Maine and asserts the establishment of a domicile in Maine, the student shall be presumed to be eligible for resident status at such student's next registration. In general, members of the Armed Forces and their dependents are granted resident status while officially stationed in the state.

In-state tuition is not available to anyone who holds a non-immigrant U.S. visa. If an individual is not a domiciliary of the United States, they cannot be a domiciliary of the State of Maine.

# **New England Regional Student Program**

Southern Maine Community College participates in the New England Regional Student Program (NERSP). This program allows a limited number of out-of-state students to attend SMCC at a rate of 150% of in-state tuition if they enter an approved course of study that is not available in their state of residence. Various restrictions and exceptions apply.

### Financial Aid

Student financial aid is available on a first-come, first-served basis to all students who apply and demonstrate financial need, as defined by federal regulations. Students must file the Free Application for Federal Student Aid (FAFSA) to apply for federal, state and SMCC student assistance, including consideration for all grants, scholarships, Direct Loans and on-campus student employment. FAFSAs are completed on-line at www.fafsa.ed.gov.

#### FAFSA Priority Filing Dates

The SMCC FAFSA priority filing date is March 1.
The FAFSA filing deadline for Maine State Grant is May 1.

Students are encouraged to file by the priority date, however, FAFSAs can be filed at anytime during the academic year and students may file after the priority filing date. Entering students should file their FAFSA early and not wait until they are formally accepted into an SMCC program.

During the 2009-10 academic year, SMCC students received over \$13 million dollars through federal, state, college, and private funding sources. Students with questions concerning any aspect of student financial assistance are strongly encouraged to contact the SMCC Student Financial Aid Office at 207-741-5518.

# **COLLEGE PARTNERSHIPS & ARTICULATION**

# Partnerships with Baccalaureate Institutions

Many SMCC graduates wish to continue their education and have successfully transferred to a wide range of baccalaureate degree granting colleges. SMCC students frequently can transfer all or most of their credits from their associate degree programs, but ultimately the decision to accept or deny transfer credit lies solely with the transfer destination.

For a current list of articulation agreements with Baccalaureate institutions, please visit the SMCC webpage at <a href="https://www.smccme.edu">www.smccme.edu</a> and click on the "Transfer & Articulation" link.

# **AdvantageU**

Participation in the AdvantageU program streamlines admission to University of Maine System (UMS) institutions for Maine Community College students graduating with an associate in arts degree in liberal studies. Benefits of the agreement for Southern Maine Community College (SMCC) students include:

Guaranteed admission at junior standing to a UMS University, when G.P.A. admission requirements are met;

Dual advising to ensure maximum transferability of community college courses;

Seamless and simplified transition from SMCC to an UMS University;

Waiver of UMS application fees

Upon a student's admission into the Liberal Studies Major at SMCC and prior to completion of 30 credits, she/he may request to join the AdvantageU program. AdvantageU participants are assured a place at a UMS University once they have graduated from SMCC with an Associate of Arts degree in Liberal Studies and have met the grade point average admission requirements for the University/major of their choice. In the majority of cases, students admitted to a UMS institution through AdvantageU would be able to complete their baccalaureate degree within two years.

# **Greater Portland Alliance of Colleges and Universities**

Southern Maine Community College belongs to the Greater Portland Alliance of Colleges & Universities (GPACU), a higher education consortium that broadens learning opportunities. Through valuable services such as cross-registration and shared library borrowing, GPACU benefits students, staff, and teachers; expands intercollegiate cooperation; and enhances the cultural, educational, and economic quality of life in Greater Portland.

Cross registration allows you to take courses toward your degree from one of the other GPACU member colleges listed below.

#### **GPACU Member Schools**

Kaplan University Maine College of Art Saint Joseph's College University of New England University of Southern Maine

#### **GPACU Guidelines:**

First-semester freshmen are not eligible to take courses through GPACU.

Students must meet all course prerequisites for the host institution.

Only Fall and Spring semester courses are eligible for cross-registration. No cross-registration is allowed during Summer or Winter terms.

The intent of the Alliance is to expose you to learning opportunities that are not available at your home institution Courses equivalent to those offered by Southern Maine Community College are not eligible to be taken at other GPACU schools regardless of transferability, availability, or schedule conflicts.

Selected courses must meet an outstanding requirement in the student's current program requirements at Southern Maine Community College. Courses toward a future major or interest only courses are not covered under GPACU.

Students are limited to (3) external courses in a single academic year and five (5) total cross-registrations throughout the duration of their time at SMCC. Any graded course including No Show (NS), Withdrawal (W), or Failure (AF or F), will count as one cross-registration. A course with separate credit for a corresponding lab will count as one cross-registration.

Students must take the majority of credits at their home institution during any semester they are cross-registered. No GPACU requests will be accepted after SMCC's add/drop period, regardless of the add/drop deadline for the host institution, which must also be met.

# Partnerships with Secondary Schools

Southern Maine Community College works with high schools and regional centers of technology to provide college exploration experiences for students, improve career guidance, link secondary and post-secondary curricula, and help prepare students for college. These goals are addressed as follows:

**College Exploration:** Secondary educators and their students visit the SMCC campus to expose students to college life. The experience is tailored to the grade level and needs of the visitors and may include sitting in on a class, observing college students in action, touring the campus, and eating in the Dining Hall.

Career Guidance: Students from area high schools experience a hands-on career exploration program when they attend Careers of the 21<sup>st</sup> Century hosted at SMCC each spring. This popular program serves over 1500 students annually. Through the welding partnership, another hands-on opportunity, students from area schools learn a skill and experience college life.

Articulation Agreements: Secondary teachers in high schools and regional centers of technology discuss what they teach with Community College faculty. When the high school course mirrors the college course, the educators form an arrangement called an articulation agreement. This allows students to earn free college credit while in high school that can be applied toward a program of study at SMCC. Credit is awarded to students who earn a B (85) or better, and meet admission standards for college level courses. These students can apply articulated credits from high school as if they were college credits. The credits appear on the SMCC transcript. Articulation agreements save students both money and time when attending college. Instead of repeating an entry-level course

that the student mastered in high school, the student can waive that course and study at a more advanced level.

**College Readiness:** SMCC personnel help inform students about the standards for college by administering the ACCUPLACER® ® to juniors at area high schools and regional centers of technology.

# Secondary School Articulation

SMCC currently has over one hundred articulation agreements with area high schools and regional centers of technology. The College continues to expand those agreements to include other schools and other programs of study. To take advantage of these:

Schools must have a written, signed agreement with the College.

Students must earn an 85 (B) in the articulated class.

Students must enter SMCC within 15 months of high school graduation.

Teachers must complete a recommendation (called a Competency Checklist).

Students must, in some cases, pass SMCC's challenge examination usually administered at the high school or submit a portfolio of "best works".

Students must submit Technical Advanced Placement forms to reguest credit by July 1.

#### Secondary School Articulation Agreements

#### **Bath Regional Career and Technical Center**

AEDD-100 Print Reading

AEDD-105 CAD Graphics

AUTO-105 Automotive Maintenance/Light Repair

CMPT-101 Intro to Computer Applications

CULA-100 Introduction to Culinary Arts

MDAS-100 Medical Terminology

#### **Biddeford Center of Technology**

ACCT-105 Financial Accounting

AEDD-100 Print Reading

AEDD-105 CAD Graphics

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

CMPT-101 Intro to Computer Applications

CNMS-135 Desktop Publishing

MACH-105 Basic Machine Theory

MDAS-100 Medical Terminology

WELD-100 Introduction to Welding

### **Biddeford High School**

PHYS-150 College Physics I & Lab

#### **Capital Area Technical Center**

AEDD-100 Print Reading

AUTO-105 Automotive Maintenance/Light Repair

AUTO-155 Electricity and Electronics
AUTO-210 Intro to Engine Repair & Performance

BIOL-110 Introduction to Biotechnology

CNMS-135 Desktop Publishing

CULA-100 Introduction to Culinary Arts

MACH-105 Basic Machine Practice Theory

MDAS-100 Medical Terminology

### **Caribou Regional Technology Center**

CULA-100 Introduction to Culinary Arts

### Falmouth High School

PHYS-150 College Physics I & Lab

### **Foster Regional Applied Technology Center**

ACCT-105 Financial Accounting

AEDD-100 Print Reading

AEDD-105 CAD Graphics

BIOL-110 Introduction to Biotechnology

CMPT-101 Intro to Computer Applications

CULA-100 Introduction to Culinary Arts

MDAS-100 Medical Terminology

WELD-100 Introduction to Welding

#### **Gray New Gloucester Adult Education**

CMPT-101 Intro to Computer Applications

MDAS-100 Medical Terminology

#### Greater Lawrence Technical School, MA

ACCT-105 Financial Accounting

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

BIOL-110 Introduction to Biotechnology

CMPT-101 Intro to Computer Applications

CNMS-135 Desktop Publishing

MDAS-100 Medical Terminology

PHYS-150 College Physics I & Lab

WELD-100 Introduction to Welding

#### **Greely High School**

PHYS-150 College Physics I & Lab

#### **Hancock County Technical Center**

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

CULA-100 Introduction to Culinary Arts

MDAS-100 Medical Terminology

#### J. Oliva Huot Technical Center, NH

BIOL-110 Introduction to Biotechnology

### Kennett High School, NH

CMPT-101 Intro to Computer Applications

#### **Lake Region Vocational Center**

ACCT-105 Financial Accounting

AEDD-100 Print Reading

AEDD-105 CAD Graphics

AUTO-105 Automotive Maintenance/Light Repair

CMPT-101 Intro to Computer Applications

CNMS-135 Desktop Publishing

CULA-100 Introduction to Culinary Arts

MDAS-100 Medical Terminology

### **Lewiston Regional Technical Center**

ACCT-105 Financial Accounting

AUTO-105 Automotive Maintenance/Light Repair

CJUS-105 Introduction to Criminal Justice

CULA-100 Intoduction to Culinary Arts

WELD-100 Introduction to Welding

#### Lynn Vocational Technical Institute

AEDD-100 Print Reading

AEDD-105 CAD Graphics

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

CMPT-101 Intro to Computer Applications

CNMS-135 Desktop Publishing

MACH-105 Basic Machine Theory

MDAS-100 Medical Terminology

WELD-100 Introduction to Welding

#### **Maine Vocational Region 10**

AUTO-105 Automotive Maintenance/Light Repair

CULA-100 Introduction to Culinary Arts

MDAS-100 Medical Terminology

WELD-100 Introduction to Welding

Mid-Coast School of Technology

AUTO-105 Automotive Maintenance/Light Repair

CNMS-135 Desktop Publishing

MACH-105 Basic Machine Practice Theory

MDAS-100 Medical Terminology

WELD-100 Introduction to Welding

### Mid-Maine Technical Center

CULA-100 Introduction to Culinary Arts

### Mt. Ararat High School

PHYS-150 College Physics I & Lab

#### Mt. Blue High School

CMPT-101 Intro to Computer Applications

### Mt. Washington Valley CTC

AEDD-105 CAD Graphics

MACH-105 Basic Machine Theory

# Nashua Technology Center North, NH

BIOL-110 Introduction to Biotechnology

#### North Shore Technical High School, MA

AUTO-105 Automotive Maintenance/Light Repair

CNMS-135 Desktop Publishing

MACH-105 Basic Machine Practice Theory

MDAS-100 Medical Terminology

### Northern Penobscot Technical Center, Region 3

AUTO-105 Automotive Maintenance/Light Repair

CULA-100 Introduction to Culinary Arts

MDAS-100 Medical Terminology

WELD-100 Introduction to Welding

### Old Colony Regional Voc. Tech. High School, MA

AUTO-105 Automotive Maintenance/Light Repair

AUTO-155 Electricity and Electronics

AUTO-210 Intro to Engine Repair & Performance

### Oxford Hills Technical School

AEDD-100 Print Reading

AEDD-105 CAD Graphics

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

CJUS-105 Introduction to Criminal Justice

CNMS-135 Desktop Publishing

MDAS-100 Medical Terminology

#### Portland Arts and Technology High School

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

CULA-100 Introduction to Culinary Arts

MACH-105 Basic Machine Practice Theory

MDAS-100 Medical Terminology

WELD-100 Introduction to Welding

#### Portland Adult Education

MDAS-100 Medical Terminology

WELD-100 Introduction to Welding

### Portsmouth High School, NH

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

#### Presque Isle Regional Career and Technical Center

ACCT-105 Financial Accounting

#### Region 2 Southern Aroostock

ACCT-105 Financial Accounting

CULA-100 Introduction to Culinary Arts

#### Region 9 School of Applied Technology

AUTO-105 Automotive Maintenance/Light Repair MACH-105 Basic Machine Practice Theory WELD-100 Introduction to Welding

#### River Bend Career and Technical Center, VT

AUTO-105 Automotive Maintenance/Light Repair

### Sanford Regional Vocational Center

AEDD-100 Print Reading

AEDD-105 CAD Graphics

AUTO-105 Automotive Maintenance/Light Repair

CNMS-135 Desktop Publishing

CULA-100 Introduction to Culinary Arts

MACH-105 Basic Machine Practice Theory

WELD-100 Introduction to Welding

#### Scarborough High School

**CMPT-101 Intro to Computer Applications** 

#### Seacoast School of Technology, NH

BIOL-110 Introduction to Biotechnology

### **Skowhegan Regional Vocational Center**

ACCT-105 Financial Accounting

CMPT-101 Intro to Computer Applications

CNMS-135 Desktop Publishing

CULA-100 Introduction to Culinary Arts

### Somersworth Career Technical Center, NH

BIOL-110 Introduction to Biotechnology

#### St. Croix Regional Technical Center

CULA-100 Introduction to Culinary Arts

#### St. John Valley Technology Center

AUTO-105 Automotive Maintenance/Light Repair

MDAS-100 Medical Terminology

WELD-100 Introduction to Welding

#### Traip Academy

ACCT-105 Financial Accounting

CMPT-101 Intro to Computer Applications

#### **Tri-County Technical Center**

CMPT-101 Intro to Computer Applications

CNMS-135 Desktop Publishing

CULA-100 Introduction to Culinary Arts

MDAS-100 Medical Terminology

#### **United Technologies Center**

AEDD-100 Print Reading

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

CMPT-101 Intro to Computer Applications

CULA-100 Introduction to Culinary Arts

**HEOP-100 Introduction to Construction Safety** 

**HEOP-115** Maintenance and Service

HEOP-130 Backhoe and Excavator

WELD-100 Introduction to Welding

#### Waldo County Technical Center

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

CJUS-105 Introduction to Criminal Justice

CMPT-101 Intro to Computer Applications

CNMS-135 Desktop Publishing

CULA-100 Introduction to Culinary Arts

WELD-100 Introduction to Welding

# **Westbrook Regional Vocational Center**

AEDD-100 Print Reading

AEDD-105 CAD Graphics

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

CJUS-105 Introduction to Criminal Justice

CMPT-101 Intro to Computer Applications

CNMS-135 Desktop Publishing

CULA-100 Introduction to Culinary Arts

**HEOP-100** Introduction to Construction Safety

**HEOP-115** Maintenance and Service

HEOP-130 Backhoe and Excavator

### Whittier Regional Vocational Technical Center, MA

AEDD-100 Print Reading

AEDD-105 CAD Graphics

AUTO-105 Automotive Maintenance/Light Repair

**AUTO-155 Electricity and Electronics** 

AUTO-210 Intro to Engine Repair & Performance

CMPT-101 Intro to Computer Applications

CNMS-135 Desktop Publishing

MACH-105 Basic Machine Practice Theory

PHYS-150 College Physics I & Lab

WELD-100 Introduction to Welding

#### Windham Adult Ed

CMPT-101 Intro to Computer Applications

MDAS-100 Medical Terminology

# STUDENT RESOURCES & SUPPORT

# Academic Achievement Center

The Academic Achievement Center is a drop-in tutoring center that is open to all students. Faculty and staff provide professional tutoring in writing, English as a second language, math, physics, accounting, chemistry, and computer applications. The Center also offers personal assistance in study skills and time management, inventories of learning styles, academic advising and peer tutoring in technology courses. Accommodations, tutoring and advising are also available for students with diagnosed learning disabilities.

The Center provides students with access to study space and to computers for word processing and other computer applications and to Internet research. Also available are reference textbooks, study guides, and multimedia materials. Please visit the Academic Achievement Center web page for hours of operation and to learn more.

# Library

The Library is SMCC's student-friendly center for research, study, and casual reading resources. The Library is located in a beautiful setting on the second floor of the Campus Center, and through its growing Web services, the Library is also anywhere our students are. The SMCC Library provides its students and faculty with a strong and evolving collection of on-site books and periodicals, on-line access to the collections of libraries throughout the State of Maine, and a growing collection of electronic books, encyclopedias, journals, magazines and newspapers. These resources are available by logging into the MySMCC portal and visiting the Library's web page. The Library's holdings and its on-line databases are selected to support the full and varied range of programs of study offered by the College.

The Library is staffed by a team of knowledgeable professionals who are dedicated to empowering students to become independent researchers who are proficient and comfortable with the use of library tools and resources. Students are welcome to participate in any number of the free research workshops offered throughout the academic year.

The physical layout of the Library is pleasant and varied and provides a choice of individual carrels, study tables, reading areas and computer workstations. Students are welcome to browse the Library's books and periodicals which are on open stacks and easily accessible. All students are encouraged to visit the Library and make its resources a part of their learning experience while attending the College.

# Advising and Counseling

Every incoming student is assigned an advisor from either the student's program of study or Student Services. A student may also request a specific advisor from his/her program.

The advisor helps each student select and register for courses and can assist with add/drop changes and withdrawals. Additionally, an advisor helps students locate academic and personal resources on campus and helps the student determine program options, such as attending college part-time while working, career goals, or pursuing further education. The more clearly a student can articulate respective needs and goals, the more productive the advisor relationship will be.

SMCC recognizes the importance of personal counseling to assist students in balancing their academic needs with problems or concerns of an individual, family, or job-related nature. An on-campus licensed counselor provides short-term counseling services to students free of charge. Confidentiality is maintained throughout the process and referrals for other community services are provided as needed. Counseling services are available through the Student Services Office.

### **New Student Advising & Registration Sessions**

New Student Advising & Registration sessions offer newly accepted students the opportunity to learn how to create a course schedule that meets their needs, how to use MySMCC, our college portal, (to not only register

for classes, but also to drop courses, access grades, and more), about their responsibilities as a student, and SMCC's important registration policies.

New Student Orientation sessions offer students an opportunity to visit key offices on campus, learn the secrets of success in college, meet faculty, staff and current SMCC students, and get to know other new students. The New Student Orientation program is designed to be interactive and fun as well as informative.

### Services for Students with Disabilities

In accordance with Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, Southern Maine Community College is committed to helping qualified students with disabilities achieve their individual educational goals. Upon request and verification of the disability, SMCC will provide service coordination and reasonable accommodations to remediate the competitive disadvantage that a disability can create in the educational setting.

Disability services are available through the Student Services Office.

### **Veterans Affairs**

SMCC welcomes Veterans and their dependents to the College and honors the service they have given to the nation. The Veterans Affairs office is located in the Student Services office in the Campus Center. The office is staffed by a full-time administrator who is available to assist veterans and their family members in negotiating the often complex processes involved in gaining certification for educational benefits. For more information, please visit the College's website, contact the Veterans Affairs office at 207-741-5926, or drop by Student Services.

# STUDENT LIFE

# Student Handbook

The Compass, SMCC's student handbook, is designed to introduce students to the many aspects of life at SMCC, including policies related to enrollment and student life, rules and regulations, and safety tips. The student handbook serves as a companion piece to the SMCC Catalog, which outlines the College's academic information, requirements, academic programs, course descriptions, and more. Students are expected to become familiar with both publications for a thorough understanding of College regulations.

# Residence Life

There are two residence halls on SMCC's campus housing approximately 405 students.

The New Residence Hall, the larger of the two halls, houses about 310 students, including eight Resident Assistants and a professional Resident Director. The new hall opened in January 2008 and is located on the corner of Benjamin Pickett St. and Fort Rd., across the street from the Campus Center. There is a large laundry room and vending area, study areas on three floors and a beautiful common lobby that houses a 42" LCD HDTV, a pool table and a ping pong table. The new hall has sweeping views of the Portland skyline and Casco Bay from its many windows.

Surfsite Hall, the smaller of the two halls, houses 93 students including three Resident Assistants and a professional Resident Director. Surfsite Hall is located diagonally up the hill from the H.U.B. Gymnasium on Surfsite Road. Surfsite Hall has a laundry room, large recreation room with a big screen TV, a pool table and a ping-pong table and a large study lounge.

The Housing and Residence Life Office includes the professional Residence Directors and the student staff listed above. The residence life staff team plans various educational and recreational activities for the residence hall students to enjoy. We expect residents to be serious about their academic work and to get involved in the residence life community. To reach staff, students should call (207) 799-5990 or 741-5967.

There is a strict policy concerning illegal drugs and alcohol on campus. SMCC prohibits use, sale, possession and/or distribution of alcoholic beverages anywhere on campus. It is a violation of the Student Code of Conduct

for any student or guest to be under the influence of or knowingly in the presence of illegal drugs or alcohol while on campus or at school-sponsored events, regardless of age. Alcohol and drug paraphernalia are not permitted in any residence hall room or common areas and will be viewed as evidence of consumption. Disciplinary action, including possible residence hall agreement termination and eviction without refund, will take place for any student found in violation, regardless of whether or not the student is of legal drinking age.

For many students, residence life represents the first extended stay away from home. As such, it is a time of major adjustment, a time when self-reliance and self-discipline become more important than one's dependence upon one's family. All students who become residence hall students at SMCC are expected to conduct themselves with regard for the welfare and the reputation of the College, the property of College community members, and most importantly the welfare of all College community members. They must refrain from any action that might injure the College or any of its members. The College reserves the right to require withdrawal, at any time, of a student whose conduct or academic standing is judged unsatisfactory.

Residence hall space is limited at SMCC; there are just 409 beds available for over 6,000 students. In addition, the College recognizes that a community living environment can sometimes provide a variety of temptations and distractions that can make it challenging for some students to focus on their primary goal—completing an academic program. Consequently, the College has created a housing application process that requires students to demonstrate their commitment to their educational goals in order to be assigned to housing.

Students who submit a complete application packet are assigned to a space or to the waiting list on a first come, first served basis.

Not every student is eligible to live on campus. Please check the Residence Life area of the website for eligibility criteria. Students may occupy their rooms on the dates specified in the College's calendar; however, they are expected to vacate the halls during the Thanksgiving Break, Semester Break, and Spring Break. The College is unable to accept responsibility for personal belongings, and suggests that students consider insuring property against loss, damage, theft and fire.

# **Dining Services**

Sodexho, a contract food service vendor, operates the SMCC Dining Hall and Campus Center Smart Market Café. The Dining Hall serves three all-you-care-to-eat meals per day Monday through Friday and two per day on the weekend for a reasonable, fixed price. Sandwiches, soups, salads, bottled drinks and coffee are available on an a la carte basis in the Café most of the day and evening.

#### Resident Students

All resident students are required to purchase a meal plan. Meal plan offerings vary from year to year in response to student needs and requests. Typically each meal plan offers a set number of all-you-care-to-eat meals in the dining hall and some "flex dollars" for use in the Smart Market Café. Students use their student ID card for payment at the register. The required meal plan cost per semester varies from year to year. Please check with the Housing and Resident Life Office for the most up-to-date rates. Whatever the cost, the price includes costs for overhead and is the same for the fall as it is for the spring, regardless of student usage. Unused meals or flex dollars purchased as part of a meal plan are forfeited if not used in the semester in which they were purchased.

#### Commuter Students

Commuter students are encouraged to eat in the dining hall and the Smart Market Café. Because the all-you-care-to-eat cash price remains reasonable, there is not currently a commuter meal plan offered.

### Beacon Bucks

Commuter students who would prefer not to carry cash on campus may deposit funds into a Beacon Bucks account for use in the Dining Hall and the Smart Market Café. There is a minimum initial deposit of \$50 and subsequent \$10 deposit minimum. These funds are debited from the student's Beacon Bucks account on a dollar for dollar basis. For example, if a student purchases a \$5 all-you-care-to-eat lunch meal, \$5 is debited from the account. Beacon Bucks balances remain active until a student ceases to be enrolled and then is forfeited, so it is in the student's best interest to deposit only funds that he or she intends to use.

# Campus Safety & Security

# Security

The Campus Safety and Security Department is open 24 hours a day. Business hours are from 7:00am-7pm. The office is located in the Fort Building (92 Campus Center Drive) across from Preble Hall. The department provides assistance to the campus community through regular patrols and other services; such as issuing parking permits and student ID cards, security escorts, lost and found repository, and emergency response services. Emergency messages for students are routed and delivered through this department. If you have any questions, or are in need of assistance, please call us at 741-5553.

# **Parking**

Southern Maine Community College is a very busy campus. In order to assure the safety and welfare of all who bring their vehicles on campus, a parking policy has been designed to keep parking orderly, provide as many spaces as possible for everyone in the community, and assure emergency vehicle access. Handicapped parking is available throughout the campus; everyone is reminded to respect these spaces and campus property by parking in approved spots only.

### Regulations

All students, staff and faculty must display a valid parking permit and date sticker. All Students attending classes at SMCC (on or off campus) must purchase a permit in order to park their vehicles on campus. Permits are assigned to a particular vehicle, and must be affixed to the lower passenger side corner of the front windshield. Any vehicle information changes during the course of the year should be reported to Safety and Security Department, ensuring any problems will be communicated to the registrant of the vehicle. Each semester students are required to update their parking permit with a valid semester date sticker.

Vehicles without a valid SMCC parking permit need to have a temporary permit in order to park on campus. These permits are issued for a maximum of 2 weeks and are only valid for student lots. If an individual needs to use a vehicle for longer than 2 weeks they must purchase a permit.

The SMCC Security Office will gladly issue temporary medical parking permits for valid medical reasons with appropriate documentation. These permits will allow students to park in faculty and staff spaces, as well as student spaces. These permits **DO NOT** allow you to park in handicapped parking.

### Parking Violations

Vehicles not parked in accordance with campus regulations will be issued a SMCC ticket, which carries a fine of \$15.00 per violation. Fire lane violations carry a \$50 fine and unauthorized parking in a handicapped parking space carries a fine of \$100. Fire Lane and Handicap tickets are City of South Portland violations that *must be paid within 15 days* to the City of South Portland or fines will double. The Campus Safety and Security Department does not accept payment for permits or fines. All SMCC ticket payments must be made to the Student Billing Office. Handicap and fire lane violations are paid at South Portland City Hall, located at 25 Cottage Road in South Portland. Instructions are printed on the ticket. A list of all violation types is available online in the Safety and Security section of MySMCC.

Noncompliance with SMCC parking policy regulations may result in action beyond ticketing. Violations may result in ticketing, booting, towing and storage, suspension and/or revocation of parking privileges, or other appropriate action at owner expense. Unpaid parking tickets may result in a hold being placed on student records. Safety and Security makes every effort to affix tickets to the front windshield, and are not responsible for lost or missing citations.

Vehicle registrants who have fines in excess of \$75.00, park in reserved spots, or for other infractions as determined by the Security Manager will be subject to having their vehicle immobilized by the use of a boot. Once the vehicle is booted, the registrant will be charged a \$25.00 administrative fee. All fines must be paid before the boot is removed unless payment arrangements are made with the Safety and Security Department. The registrant of a booted vehicle who does not take appropriate action may be subject to having the vehicle towed from campus at their expense.

All overnight and school trip parking must be approved by the Safety and Security Department, who will inform vehicle operators of the areas they may park. Security reserves the right to tow vehicles from campus parking lots not designated for overnight or long-term parking.

SMCC makes every effort to provide parking to all members of the campus community, please realize that possessing a permit does not guarantee you a parking space on campus.

### Student Activities and Athletics

SMCC strives to engage students both inside and outside of the classroom by complementing the enriching classroom experience with a variety of activities for students. Students who are active participants in the life of the college are more likely to persist and be successful in college. Getting involved provides an opportunity to build connections with fellow students and with faculty and staff and to develop lifelong friends and mentors. No matter what a student's interest, the college provides an opportunity to get involved; from student government, honors and community service societies, technical and trade organizations, the student newspaper and literary magazine, to intercollegiate athletics. For more information on student organizations, or on how to start a new student organization, stop by the Center for Student Involvement and Leadership (CeSIL) in the Campus Center.

### **Athletics**

The College offers eight intercollegiate sports. They include men's and women's basketball, baseball, softball, men's and women's soccer, and men's and women's golf. In addition, a variety of intramural sports and recreational activities are offered. The athletic philosophy of the College is to be competitive with our peers in all areas, but to give primary emphasis to the academic and personal success of the students involved. The Director of Athletics, staff, and all coaches have put together an athletic program for both the serious athlete interested in varsity competition and the general student population seeking a recreational outlet.

Located at the front of our 80-acre oceanside campus, the Hutchinson Union Building, or "HUB", serves as the center of all athletic programs at the College. The large gymnasium, three locker rooms, weight room, and wellness center are all available to our general student population, as well as to faculty and staff. The HUB is complemented by our baseball diamond, softball and soccer fields.

Southern Maine Community College holds memberships in the Yankee Small College Conference (YSCC), which is a regional league and its parent, the United State College Athletic Association (USCAA), which is national.

# **Center for Student Involvement & Leadership**

The Center for Student Involvement and Leadership (CeSIL), located on the first floor of the Campus Center, is a one-stop resource to learn about ways to become involved on campus. The center has information on the student clubs and organizations on campus, how to start a new student organization, community service opportunities and activities and events on campus. The center is a great place to learn about student leadership opportunities such as serving on the Student Senate, working as an Orientation and Welcome Leader and participating in various leadership education programs. The Center is also home to the offices of the Student Senate, The Alpha Chi Nu Chapter of Phi Theta Kappa and The Beacon student newspaper.

### The Student Senate

The Student Senate represents all students in organizing campus events and sponsoring student organizations and clubs. The Student Senate plans large campus wide events such as the Welcome Back BBQ, Winter Carnival and Spring Fest. Student Senate has also presented comedians, singers, hypnotists and a variety of other entertainment on campus as well as trips to off-campus events such as hockey games and amusement parks. Senate sponsored programs have also included poetry readings, open microphone nights, and trips to theatrical productions. In addition to activities planning, the Student Senate represents the voice of the students to the administration of the college and advocates for the interests, ideas and welfare of the student body.

# The Phi Theta Kappa International Honor Society

Phi Theta Kappa is the honor society of the two-year college. All eligible students receive a letter of invitation from the College president to join Phi Theta Kappa. The purpose of Phi Theta Kappa is to recognize and

encourage academic excellence and scholarship among students. The chapter also provides students with the opportunity to serve in the community and to develop leadership skills. Many students join not only to participate in service work and leadership opportunity, but also for the lively fellowship and stimulation of interest in continuing academic excellence. Chapter members are also eligible for transfer scholarships to four-year colleges and universities.

### Membership Qualifications

#### Candidates

- Must be matriculated in an associate degree program.
- Must have earned a minimum of 12 college-level credits at SMCC.
- Must have a minimum cumulative GPA of 3.50.

#### To Maintain Membership:

Member must maintain a minimum cumulative GPA of 3.50.

# **Student Newspaper & Publications**

The Beacon is the official student newspaper of Southern Maine Community College and features college news as well as features and columns on topics of interest for the student body.

The Writ literary magazine is a publication written and edited by SMCC students featuring works of fiction, non-fiction and poetry.

### Skills-USA

The College sponsors a chapter of Skills-USA, a national organization for students preparing for careers in technical, skilled and services occupations, including heath occupations. The SMCC chapter competes at the statewide level and has sent a number of students to the national competition in Kansas City, Missouri.

# **College Chorus**

The SMCC Chorus is open to singers of all abilities and performs a number of times each year, including SMCC's graduation ceremony.

# ACADEMIC PROGRAMS

The college offers programs awarding associate in applied science, associate in science, and associate in arts degrees; and certificate programs. Associate degrees require at least two academic years of study. The certificate option is offered in selected areas and normally requires one year or less of study. All options may be taken over extended times beyond one or two years and often through both day and evening courses.

Each program of study is made up of three groups of courses: general education courses that meet specific core curriculum requirements for that credential and develop communication, analytical and problem solving skills, increased awareness of the physical and social world and of other cultures; program requirements; and discipline related courses that support and reinforce the program requirements. Successful completion of all courses or equivalencies in a curriculum is required for the awarding of an associate degree or certificate from the College.

Curricula may be modified without notice as adjustments are made in response to occupational needs, industrial change, and Advisory Committee recommendations that provide the College with contacts in the various fields of technology to ensure up-to-date programs. Program availability is based upon adequate enrollment and resources.

# **General Education Learning Outcomes**

The general education requirements for Southern Maine Community College programs represent the College's definition of an educated student.

#### Arts & Humanities:

SMCC students differentiate and evaluate various perspectives of the human intellect and imagination.

- Study, create, or participate in a work that demonstrates artistic and/or aesthetic value.
- Critique a work's artistic and/or aesthetic value.
- Demonstrate an appreciation of the creative arts in personal, cultural and historical perspectives.
- Analyze and interpret literature.
- · Articulate an understanding of major philosophical questions.
- Demonstrate an understanding of the inter-relationship of arts and humanities to one's self, other disciplines, and the life of the community.

### Communications:

SMCC students effectively communicate through writing, speaking and listening.

- Show ability to communicate ideas clearly, with a specific purpose and to a specific audience, utilizing
  appropriate strategies for varying contexts and logical organization methods.
- Demonstrate knowledge of literary analysis and comparison/contrast rhetorical modes and identify appropriate uses for each.
- Apply revision methods to achieve polished final draft/presentation, using standard academic format and conventions of grammar.
- When necessary, utilize information literacy skills, including evaluation of information from a variety
  of media and proper MLA and/or APA documentation.
- · Use critical thinking and listening skills in written and oral communication as a tool for learning.

#### Critical Thinking:

SMCC students evaluate information to make educated decisions based on the fusion of experience, reason, and training.

#### (Level I, Introductory)

- Read and demonstrate understanding of complex ideas by identifying key concepts.
- Apply theory to practice using problem solving techniques and data analysis.

#### (Level II, Reinforce)

- Analyze and evaluate research data to produce a well-reasoned argument or position on an issue.
- Synthesize data from multiple sources to create and support a new solution that considers relevant ethical standards.

#### Global Citizenship:

SMCC students can articulate how their personal growth and development are shaped by ethical choices, cultural differences and global interconnectedness.

SMCC students can explain their culture within the context of global and cultural diversity.

SMCC students will meet a minimum of at least three out of the following four competencies.

- SMCC students can demonstrate knowledge of cultures that are separated from their own by both
  time and space and demonstrate the significant connections between the contemporary world and
  past peoples, events and societies.
- SMCC students can explain how the social sciences help us understand the interactions of societies locally, regionally, nationally and globally.
- SMCC students can recognize cultural and individual differences that underlie the complexities of human behavior.
- SMCC students can demonstrate knowledge of political and/or economic systems and ways they are globally connected.

#### Quantitative Methods:

SMCC students logically analyze and solve quantitative problems.

#### (Level I, Introductory)

- Solve problems using algebraic techniques.
- Interpret information presented in charts and graphs or illustrate a scenario using graphic techniques.

#### (Level II, Reinforce)

- Create an algebraic and/or graphical model to represent a given situation.
- Utilize quantitative methods to solve and/or assess complex problems to support decision making, forecasting, and recommendations.

#### Science & Technology:

SMCC students apply the scientific method and employ the technological skills necessary to function effectively in an increasingly complex world.

- Participate in a direct experience of scientific inquiry of the natural world using the scientific method.
- Apply scientific principles, concepts and knowledge to distinguish between science and pseudoscience.
- Find and evaluate credible sources of scientific information using a variety of media to support a
  research need.
- Demonstrate the capacity to make informed and ethical judgments about the impact of science and technology on the self, the environment, and the practice of sustainability.

# **Degree Programs**

#### Associate of Arts (AA)

The Associate of Arts Degree is intended to provide a basic foundation for a Bachelor of Arts Degree program.

#### Associate of Applied Science (A.A.S.)

The Associate of Applied Science Degree is intended to provide the preparation necessary for potential employment in an occupational specialty.

#### Associate of Science (A.S.)

The Associate of Science Degree is intended to provide the preparation necessary for potential employment in an occupational specialty and/or a basic foundation for a Bachelor of Science Degree program.

#### Certificate

A certificate is awarded for specific studies that one can complete in a one year program or less. Certificates can be a permanent solution or a first step in developing, changing, or upgrading your career.

The following table details the number of credits required in each category of the College's core curriculum:

Degree	Composition	Literature	English	Social Science	Humanities	Math/Science	Total
A.A.	3	3	3	9	9	7	34
A.A.S.	3	3		3-6	3	7-10	22
A.S.	3	3		3-6	3-6	12-18	30

# **Degrees Offered**

#### Architectural & Engineering Design

A.A.S. in Architectural & Engineering Design

#### Art

A.A. in Liberal Studies Art Concentration

#### **Automotive Technology**

A.A.S. in Automotive Technology

#### Behavioral Health and Human Services

A.A.S. in Behavioral Health and Human Services Certificate in Behavioral Health Science

#### Biology

A.A. in Liberal Studies Biological Science Concentration

#### Biotechnology

A.S. in Biotechnology

# **Business Administration**

A.S. in Business Administration

#### Cardiovascular Technology

A.A.S. in Cardiovascular Technology Invasive Option Non-Invasive Option

#### **Computer Technology**

A.A.S. in Computer Technology

#### **Communications and New Media**

A.A.S. in Communications and New Media

#### Construction

A.A.S. in Construction Technology Certificate in Residential Framing

#### **Criminal Justice**

A.A.S. in Criminal Justice

#### **Culinary Arts**

A.A.S. in Culinary Arts

#### **Dietetic Technology**

A.S. in Dietetic Technology Early Childhood Education A.A.S. in Early Childhood Education Certificate in Early Childhood Education

#### Education

A.A. in Liberal Studies Elementary Education Concentration (K-8) A.A. in Liberal Studies Secondary Education Concentration (7-12)

#### **Electrical Engineering Technologies**

A.A.S. in Electrical Engineering Technologies Certificate in Electrician Technology English

#### English

A.A. in Liberal Studies English Concentration

#### **Emergency Medical Services/Paramedicine**

A.A.S. in Paramedicine

#### Fire Science

A.A.S. in Fire Science Technology Certificate in Fire Science Technology

#### Heating, Air Conditioning, Refrigeration & Plumbing

A.A.S. in Heating, Air Conditioning & Refrigeration A.A.S. in Heating & Plumbing

Certificate in Heating

Certificate in Plumbing

Certificate in Refrigeration & Air Conditioning

### **Heavy Equipment Operations**

Certificate in Heavy Equipment Operations

#### History

A.A. in Liberal Studies History Concentration

#### Horticulture

A.A.S. in Horticulture

#### Machining

A.A.S. in Integrated Manufacturing Precision Machining Option Advanced Certificate in Multi-Axis Machining

#### Mathematics

A.A. in Liberal Studies Mathematics Concentration

#### Liberal Studies

A.A. in Liberal Studies Liberal Studies Concentration (Undeclared)

#### **Lodging and Restaurant Management**

A.A.S. in Lodging and Restaurant Management

#### Marine Biology and Oceanography

A.S. in Applied Marine Biology and Oceanography

#### **Medical Assisting**

A.A.S. in Medical Assisting Administrative Option A.A.S. in Medical Assisting Clinical & Administrative Option

#### Nursing

A.S. in Nursing

A.S. in Nursing LPN Upgrade Option

#### **Political Science**

A.A. in Liberal Studies Political Science Concentration

#### Psychology

A.A. in Liberal Studies Psychology Concentration

#### Radiation Therapy

A.S. in Radiation Therapy

#### Radiography

A.S. in Radiography

### **Respiratory Therapy**

A.S. in Respiratory Therapy

#### Science

A.A. in Liberal Studies Science Concentration

#### Social Work

A.A. in Liberal Studies Social Work Concentration

#### **Sport Management**

A.S. in Business Administration Sport Management Option

#### Surgical Technology

A.A.S. in Surgical Technology

# **Trade and Technical Occupations**

A.A.S. in Trade and Technical Occupations

#### Welding

A.A.S. in Integrated Manufacturing Precision Welding Option Certificate in Welding Technology

# **Program Information**

# Architectural & Engineering Design

The Architectural & Engineering Design program prepares students for technician level work assisting architects, engineers, and contractors who work in the diverse manufacturing industry. Offering a variety of drafting/design disciplines, the program provides students with individual choices of specialization including architectural, mechanical and electro-mechanical interests.

The Architectural and Engineering Design program provides a wide selection of courses, both specific and broad in scope, reinforced by established degree-level courses in general education and related technologies. The program is accessible for the full- or part-time student. Some sequential scheduling of courses, however, is necessary to provide program continuity. All candidates are encouraged to contact the advisors in the Architectural and Engineering Design department regarding course and program selection.

Upon completion of the program, graduates will be able to:

- Understand and apply proper technical graphic standards
- · Acquire and demonstrate knowledge within several design disciplines
- · Identify and solve design problems by working with recognized methods and material limits
- Understand and use Computer Aided Design software to generate accurate designs in two and threedimensional formats.
- Demonstrate an ability to meet deadlines, manage time for multiple tasks and make revisions
- Acquire the skills to organize and present designs, drawings and concepts clearly to groups.

# Architectural & Engineering Design Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra, physics, and geometry is recommended.

# Associate in Applied Science

Architectural & Engineering Design

Genera	General Education Requirements					
ENGL	100	English Composition	3 credits			
ENGL	110	Oral Communications	3 credits			
ENGL	115	Introduction to Literature	3 credits			
MATH	145	College Algebra and Trigonometry	4 credits			
		Fine Arts or Humanities Elective	3 credits			
		Mathematics Elective				
		Physics Elective	4 credits			
		Social Science Elective	3 credits			
Major I	Requir	red Courses				
AEDD	100	Print Reading	3 credits			
AEDD	105	CAD Graphics				
AEDD	160	CAD Applications	3 credits			
AEDD	205	Technical Illustration	3 credits			
AEDD	210	CAD-3D	3 credits			
AEDD	255	Applied Engineering-Buildings				
AEDD	260	CAD Management	3 credits			
		Architectural & Engineering Design Electives	9 credits			
		Approved Technical Electives	6 credits			
		Total Credits Required for Degree:	62 credits			

# **Automotive Technology**

The Automotive Technology program is designed to prepare skilled technicians to work in the automotive industry. The program involves general education as well as automotive lecture and laboratory instruction focusing on state-of-the-art products. Students may also work at a dealership as part of the cooperative education phase of training.

The program is certified by National Automotive Technicians Education Foundation, Inc. (NATEF, a division of Automotive Service Excellence), in all eight performance areas. Opportunities for graduates include positions in dealerships, independent shops, automotive parts stores, and companies with vehicle fleets as general technicians. Positions may allow technicians to specialize in areas such as front-end alignment, brakes, automatic transmissions, engine performance, heating, ventilation and air conditioning systems, and others.

Upon completion of the Automotive Technology program, graduates will be able to:

- Perform tasks to diagnose and repair components of electrical/electronic systems, and heating, ventilation and air conditioning systems.
- Perform tasks to diagnose and repair automotive engine and power train systems.
- Perform tasks to diagnose and repair components of automotive suspension and steering systems.
- Perform tasks to diagnose and repair components of hydraulic and anti-lock brake systems.

## Automotive Technology Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. A current, clean, and valid driver's license is required for admission to the Automotive Technology program. High school or post-secondary coursework in algebra is recommended.

# Associate in Applied Science

Automotive Technology						
Genera	General Education Requirements					
ENGL	100	English Composition	S			
ENGL	115	Introduction to Literature	S			
MATH	125	Discrete Mathematics	S			
PHYS	110	Technical Physics & Lab4 credits	S			
		Fine Arts or Humanities Elective	S			
		Social Science Electives	ŝ			
Major F	Require	ed Courses				
AUTO	105	Automotive Maintenance&Light Repair3 credits	S			
AUTO	110	Steering and Suspension				
AUTO	115	Automotive Brake Systems	S			
AUTO	155	Electricity and Electronics4 credits	5			
AUTO	160	Automotive Business Operations	ŝ			
AUTO	170	Automotive HVAC3 credits	ŝ			
	OR	Cooperative Education/Advanced Lab I	ŝ			
AUTO	205	Electricity and Electronics II	ŝ			
AUTO	210	Intro Engine Repair & Performance4 credits	ŝ			
AUTO	215	Manual Transmissions and Drivelines4 credits	S			
	OR	Cooperative Education/Advanced Lab II	S			
AUTO	255	Advanced Automotive Diagnostics4 credits	S			
AUTO	265	Automatic Transmissions & Transaxles4 credits	s			
	OR	Cooperative Education/Advanced Lab III	S			
		Total Credits Required for Degree: 71 credits	S			

#### **Behavioral Health and Human Services**

The Behavioral Health & Human Services program is designed to prepare individuals with the necessary knowledge and skills for employment and/or future study in the human service field. Successful graduates work with individuals of all ages confronting disabling mental health issues, developmental disabilities, substance abuse, and other behavioral health conditions.

The Associate in Applied science degree in Behavioral Health and Human Services is designed primarily for students seeking to enter the work force after graduation or to advance their career at their place of employment. Graduates of the associate degree program are automatically MHRT/Community certified by virtue of their degree and eligible for Ed Tech II certification.

The Associate in Arts degree in Liberal Studies Social Work concentration is designed for transfer to a baccalaureate program in social work or human services. The curriculum is built on a foundation of general education classes, supplemented with elective courses that focus heavily on relevant general education coursework with some specialization.

Upon completion of the Behavioral Health & Human Services program, graduates will be able to:

- Demonstrate an understanding of the nature of human systems: individual, group, organization, community and society, and their major interactions.
- Demonstrate an understanding of human development, group dynamics, organizational structure, how
  communities are organized, how national policy is set, and how social systems interact in producing human
  problems.
- Demonstrate an understanding of the conditions that promote optimal functioning or the classes of deviation that limit desired functioning in the major human systems.
- Demonstrate an understanding of the major models of causation that are concerned with the promotion of healthy functioning and treatment rehabilitation.
- Identify and select interventions, which promote growth and goal attainment. Graduates will be able to conduct a competent problem analysis and select strategies, services, or interventions that are appropriate to helping their clients attain a desired outcome.
- Plan, implement, and evaluate interventions. The student will be able to design a plan of action for an identified problem and implement the plan in a systematic way.
- Select interventions, which are congruent with the values of one's self, clients, the employing organization
  and the human service profession.
- Use verbal and oral communication, interpersonal relationships, and other related personal skills (such as self discipline and time management) effectively to plan and implement services.

#### Behavioral Health Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions.

#### Associate in Applied Science Behavioral Health and Human Services

Denuvio	i ui iic	cutti una naman sei vices				
General Education Requirements						
ENGL	100	English Composition	3 credits			
ENGL	115	Introduction to Literature	3 credits			
PSYC	100	Introduction to Psychology	3 credits			
SOCI	100	Introduction to Sociology	3 credits			
BIOL	100	General Biology & Lab	4 credits			
		Fine Arts or Humanities Elective	3 credits			
		Mathematics Elective	3 credits			
Major Required Courses						
BHHS	100	Introduction to Human Services	3 credits			
BHHS	105	Crisis Intervention	3 credits			
BHHS	110	Psychosocial Rehabilitation	3 credits			

BHHS	150	Special and Diverse Populations	3 credits
BHHS	220	Interviewing and Counseling	3 credits
BHHS	225	Behavioral Health Practicum	3 credits
BHHS	230	Substance Abuse	3 credits
BHHS	260	Group Process	3 credits
BHHS	265	Trauma, Sexual Abuse, and Recovery	3 credits
BHHS	270	Case Management	3 credits
BHHS	275	Direct Service Practicum II	3 credits
PSYC	220	Developmental Psychology	3 credits
		Behavioral Health Elective	3 credits
		Total Credits Required for Degree:	61 credits

#### Behavioral Health Certificate

The one-year Behavioral Health certificate program is specifically designed to meet the requirements for certification as a Mental Health Rehabilitation Technician (MHRT/Community). This certificate is required by the state of Maine for work as an entry-level mental health practitioner. Associate Degree candidates need not apply separately to the Certificate program in order to qualify for MHRT/Community via that program.

#### Certificate Behavioral Health

Denavioral neutrin							
Require	Required Courses						
BHHS	100	Introduction to Human Services3 c	redits				
BHHS	105	Crisis Intervention3 c	redits				
BHHS	110	Psychosocial Rehabilitation3 c	redits				
BHHS	150	Special and Diverse Populations3 c	redits				
BHHS	175	Behavioral Health and Aging3 c	redits				
BHHS	220	Interviewing and Counseling3 c	redits				
BHHS	230	Substance Abuse3 c	redits				
BHHS	260	Group Process3 c	redits				
BHHS	265	Trauma, Sexual Abuse, and Recovery3 c	redits				
BHHS	270	Case Management	credits				
		Total Credits Required for Certificate: 30 c	redits				

# **Biotechnology**

Biotechnology is the use of technology and applied biology to find solutions to problems. Career and research opportunities include animal sciences, biomedical technologies, immunology, pharmaceutics, forensics, plus marine and environmental science. Students learn the fundamentals of biology and chemistry and gain an advanced understanding of related subfields such as cellular biology, genetics, and microbiology. Students work with DNA, cells, enzymes, and other biological agents in hands-on laboratory settings, and have the opportunity to work in outside laboratories as part of a summer internship program. Graduates find employment in entry-level biotechnology positions, including jobs as manufacturing, research, and lab technicians or transfer to a baccalaureate degree program.

Upon completion of the Biotechnology program, graduates will be able to:

- Communicate effectively, using the language, concepts and models of biotechnology.
- Use the scientific method to define and solve problems independently and collaboratively.
- Use a wide variety of laboratory techniques with accuracy, precision, and safety.
- Accurately interpret scientific information.
- Demonstrate proficient library, mathematical and computer skills in data gathering and analysis.
- · Apply scientific concepts to environmental and societal issues.
- Apply their learning in an off-campus professional setting.

#### Biotechnology Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High school or post-secondary coursework in algebra is recommended.

#### Associate in Science

Biotechnology

Genera	LEGUC	ation Requirements
CHEM	120	General Chemistry I with Lab
CHEM	125	General Chemistry II with Lab4 credits
ENGL	100	English Composition3 credits
ENGL	110	Oral Communications3 credits
ENGL	115	Introduction to Literature3 credits
MATH	145	College Algebra and Trigonometry4 credits
MATH	230	Statistics3 credits
PHIL	105	Ethical Dilemmas3 credits
PHYS	110	Technical Physics & Lab4 credits
		Social Science Elective3 credits
Major F	Require	ed Courses
BIOL	110	Introduction to Biotechnology4 credits
BIOL	120	Biology I
BIOL	121	Biology I Lab
BIOL	125	Biology II3 credits
BIOL	126	Biology II Lab
BIOL	210	Genetics3 credits
BIOL	211	Genetics Lab
BIOL	250	Microbiology with Lab5 credits
BIOL	255	Cell Biology3 credits
BIOL	275	Biotechnology Internship
		Computer Applications Elective3 credits
		Total Credits Required for Degree: 63 credits

# **Business Administration**

The Business Administration program provides students with a foundation in general business practices, leadership concepts, and microcomputer applications. In addition to acquiring skills in accounting, finance, sales, and operations, students enhance their ability to write, think, work in groups, solve problems and build confidence and the ability to succeed in the world of business.

The Associate in Science degree emphasizes math, science, and core business requirements. The sequence of courses comprises the typical transfer option that many baccalaureate programs prefer, deferring many upper-level business courses until the third or fourth year.

Upon completion of the Business Administration program, graduates will be able to:

- Make decisions and take actions that enable businesses/organizations to earn profits and grow.
- Describe and utilize the role of science, technology, and market commercialization in the creation of viable products and services.
- Demonstrate an ability to understand organizational structures.

#### **Business Admission Requirements**

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions.

### Associate in Science

# **Business Administration**

General Education Requirements					
ENGL	100	English Composition3 credits			
ENGL	110	Oral Communications3 credits			
ENGL	115	Introduction to Literature			
MATH	140	College Algebra3 credits			
MATH	230	Statistics			
		Fine Arts or Humanities Elective3 credits			
		Mathematics Elective			
		Science Elective with Lab4 credits			
		Social Science or Humanities Electives			
Major f	Require	ed Courses			
ACCT	105	Financial Accounting3 credits			
ACCT	155	Managerial Accounting3 credits			
BUSN	100	Introduction to Business			
BUSN	260	Business Law3 credits			
ECON	120	Microeconomics			
ECON	125	Macroeconomics3 credits			
		Intermediate Accounting or HR Management3 credits			
		Business Electives			
		Computer Applications Elective3 credits			
		Total Credits Required for Degree: 61 credits			

# Associate in Science Business Administration

Sport Management Option

-	_	
Genera	l Educ	ation Requirements
ENGL	100	English Composition
ENGL	115	Introduction to Literature
MATH	140	College Algebra
MATH	230	Statistics
PSYC	100	Introduction to Psychology
		Fine Arts or Humanities Elective
		Economics Elective
		Mathematics Elective
		Science Elective with Lab
Major F	Require	ed Courses
ACCT	105	Financial Accounting
ACCT	155	Managerial Accounting3 credits
BUSN	100	Introduction to Business
BUSN	255	Human Resource Management3 credits
MKTG	200	Marketing3 credits
PSYC	230	Sport Psychology3 credits
SPTM	105	Foundation of Sport
SPTM	155	Introduction to Sport Management
SPTM	200	Sport Management Internship I
SPTM	205	Sport and Facilities Management
		Total Credits Required for Degree: 61 credits
		Total Credits Required for Degree.

# Cardiovascular Technology

The Cardiovascular Technology program provides graduates with the skills necessary to work with medical professionals in cardiac catheterization laboratories, operating rooms, non-invasive laboratories, and echocardiography departments. Students receive training in cardiovascular physiology, medical electronics and instrumentation, and applied cardiovascular techniques, and are introduced to both invasive and non-invasive patient care areas.

Students spend time in both the classroom setting and at various clinical sites throughout their educational experience. The clinical component of the program includes more than 1,240 hours of patient care experience over four of the five semesters and is closely aligned with the cardiovascular curriculum.

Students enrolled in the Cardiovascular Technology program are encouraged to take Part 1 – Basic Science Exam from Cardiovascular Credentialing International (CCI) while enrolled at SMCC. Upon completion of the program, graduates are eligible to take the registry level examination (Part 2 of the two-part certification examination). Students may select either the Registered Cardiac Sonographer (RCS) or the Registered Cardiovascular Invasive Specialist (RCIS).

Career opportunities for graduates are numerous. The growth in cardiovascular surgeries, diagnostic procedures and interventional techniques, and the continued advances in echocardiography and non-invasive cardiology, has increased the demand for qualified cardiovascular technologists throughout the nation.

Upon completion of the Cardiovascular Technology program, graduates will be able to:

- Demonstrate attitudes and behaviors in the clinical setting consistent with a technologist level Cardiovascular Care Practitioner.
- Demonstrate and perform in the clinical setting, twelve lead ECGs and echocardiograms.
- Calculate hemodynamic parameters in the clinical setting.
- Set up, operate, and perform various blood analyses utilized during open heart surgery.
- Assist the cardiologist with invasive and therapeutic procedures utilizing aseptic technique.

#### Cardiovascular Technology Admission Requirements

For information about Southern Maine Community College health science admission requirements, visit the Admissions area of the website. High School or post-secondary coursework in Algebra and Biology with Lab is recommended.

#### Associate in Science

Cardiovascular Technology

Genera	General Education Requirements					
BIOL	130	Anatomy & Physiology I3 credits				
BIOL	131	Anatomy & Physiology I Lab				
BIOL	135	Anatomy & Physiology II3 credits				
BIOL	136	Anatomy and Physiology II Lab				
CHEM	120	General Chemistry I with Lab4 credits				
ENGL	100	English Composition3 credits				
ENGL	115	Introduction to Literature3 credits				
MATH	140	College Algebra				
MATH	230	Statistics3 credits				
PSYC	100	Introduction to Psychology3 credits				
		Fine Arts or Humanities Elective3 credits				
Major f	Require	ed Courses				
CARD	100	Intro to Cardiovascular Technology3 credits				
CARD	105	Medical Instrumentation3 credits				
CARD	115	Non-Invasive Testing3 credits				
CARD	125	Clinical Practicum I				
CARD	160	Cardiovascular Physiology/Patho I				
CARD	175	Clinical Practicum II				

	CARD	180	Rehabilitation and Prevention	3 credits
	CARD	210	Cardiovascular Physiology/Patho II	2 credits
	CARD	215	Vascular Imaging and Pathology	3 credits
	CARD	225	Clinical Practicum III	6 credits
	CARD	275	Clinical Practicum IV	12 credits
	HLTH	155	Pharmacology	
	RESP	115	Applied Physics for Health Sciences	2 credits
ı	OPTIO	N I : IN	VVASIVE CARDIOVASCULAR TECHNOLOGY	8 credits
	CARD	150	Invasive Cardiovascular Tech I	3 credits
	CARD	155	Invasive Cardiovascular Tech Lab I	1 credit
	CARD	200	Invasive Cardiovascular Tech II	
	NURS	100	Dosage Calculations	1 credit
ı	OPTIO	N II: N	ION-INVASIVE CARDIOVASCULAR TECHNOLOGY	9 credits
	CARD	165	Ultrasound Physics&Instrumentation	3 credits
	CARD	170	Echocardiography I	3 credits
	CARD	220	Echocardiography II	
ı		Total	l Credits Required for Degree:	5-86 credits

# **Computer Technology**

The Computer Technology program concentrates on the three major areas in the information technology industry: programming, networking, and computer hardware/operating systems. The program provides the student with a broad-based education that will prepare them for a career in the information technology field. The curriculum, which includes a large amount of hands-on experience in individual and team-based projects, is designed to encourage the student to develop critical thinking skills and a well-rounded knowledge of the computer industry and its applications.

The program provides students with experience in the installation, configuration and maintenance of Microsoft and open source operating systems; network design and management; object oriented programming; database design and management; web based software development; and microcomputer hardware maintenance and support.

Career opportunities for our graduates include: user support/helpdesk technician, desktop computer service technician, programmer, web server administrator, and network administrator.

Upon completion of the Computer Technology program, graduates will be able to:

- Build, maintain, and repair personal computer systems.
- Install, configure, and maintain Microsoft and open source operating systems.
- Build personal computer based local area networks.
- Create and manage Microsoft Windows® and Linux network objects and services.
- Create programs, applications, and web services utilizing various programming languages.
- Design, build and maintain databases.

#### Computer Technology Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in Algebra I, Algebra II, and Introduction to Microcomputers is recommended.

#### Associate in Applied Science Computer Technology

Genera	General Education Requirements					
ENGL	100	English Composition	3 credits			
ENGL	115	Introduction to Literature	3 credits			
MATH	125	Discrete Mathematics	3 credits			

		Fine Arts or Humanities Elective
		Science Elective with Lab4 credits
		Social Science Electives6 credits
Major	Require	ed Courses
CMPT	100	Introduction to Computer Technology4 credits
CMPT	105	Introduction to Web Programming4 credits
CMPT	110	Introduction to Databases
CMPT	115	Microcomputer Hardware4 credits
CMPT	120	Open Source Operating Systems4 credits
CMPT	125	Structured Programming3 credits
CMPT	210	Applications in Software3 credits
CMPT	215	Microsoft Operating Systems3 credits
CMPT	220	Network System Management3 credits
CMPT	225	Network Engineering3 credits
CMPT	230	Senior Internship3 credits
CMPT	235	Senior Seminar
		Computer Technology Elective3 credits
		Total Credits Required for Degree: 65 credits

# Communications and New Media

Communications and New Media is a multi-media program that prepares students for careers as media producers. Media producers use technology to create and enhance communication through the integration of visual, audio, and web to present design solutions. They create web sites, interactive and 3-D animation, and graphic design for print media; they edit video for TV and web; they produce and edit scripts for TV and radio. This is a hands-on program providing students with access to industry-standard software and gear through work in state-of-the-art labs.

The CNM program provides students with a strong foundation in web, video/ audio, and print media. Once the fundamental courses have been completed, students can choose to specialize by selecting from a flexible menu of advanced curriculum options including Animation & Gaming, Digital Imaging & Design, Video & Audio Production, or Website Production. Students in the CNM program can transfer to a baccalaureate program in visual communication or art. The program is designed to prepare students for entry level employment in graphics and production.

Upon completion of the Communications and New Media program, graduates will be able to:

- Demonstrate the ability to incorporate language, visual images, and sounds using a variety of digital media formats to influence thought, emotions, and behaviors.
- Analyze and assess the influence of mass media on individual perceptions, social behaviors, and cultural change.
- Analyze, assess, and critique media productions for accuracy of information, audience relevance, aesthetic style, balance of perspectives, and overall effectiveness.
- Demonstrate a respect for a diversity of ideas and concepts within a group environment and the ability to
  effectively communicate personal viewpoints and criticism.

#### Communications and New Media Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High school or post-secondary coursework in Algebra is recommended.

#### Associate in Applied Science Communications and New Media

commu	Sommanications and New Media				
Genera	l Educ	ation Requirements			
ENGL	100	English Composition3 credits			
ENGL	115	Introduction to Literature			
PHYS	110	Technical Physics & Lab4 credits			
		Fine Arts or Humanities Elective			
		Mathematics Elective3 credits			
		Social Science Elective3 credits			
Major F	Require	ed Courses			
CNMS	105	Introduction to Mass Communication			
CNMS	110	Computer Communications3 credits			
CNMS	111	Digital Imaging, Design and Illustration			
CNMS	115	Foundations of Visual Design			
CNMS	125	Writing for Media3 credits			
CNMS	155	History of Mass Communications			
CNMS	160	Video & Audio Production Basics			
CNMS	165	Website Production3 credits			
		Communications & New Media Electives			
		Total Credits Required for Degree: 64 credits			

# Construction

The Construction Technology program provides technical and extensive hands-on experience in residential construction and light commercial construction, preparing its graduates for a rewarding career in the construction industry.

The construction field involves constantly changing technology in today's continuing search for more energy-efficient structures. Technically trained professionals with innovative ideas and the skills to apply these ideas and knowledge are needed to meet the challenges of today's building industry. The program curriculum is constantly under revision to keep up with industry demands. Related subjects such as blueprint reading, drafting, English composition and math provide students with a well rounded education, allowing them to obtain employment in a variety of positions within the construction business or its related fields.

All students participate in framing and finish projects, which provide them with the knowledge and skills to build single or multi-family homes according to standard trade practices. All classes are conducted in an environment that prepares students for the expectations of future employers. The program's commercial curriculum provides students with a broad knowledge of concrete design, placement and testing, and prepares the students for national certification testing conducted yearly in the department. Students also become familiar with erection of steel building by constructing a prefabricated steel building.

Upon completion of the Construction Technology program, graduates will be able to:

- Design and build a single-family residence.
- Layout and build a timber-frame structure.
- Demonstrate the proper method of constructing a light commercial steel building.
- · Design, place and test concrete.
- Install all interior finish and cabinetry in any structure.
- Estimate all materials needed for a residential and light commercial building.
- Identify and deal with a variety of environmental issues pertaining to the industry.

#### Construction Technology Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra, physics, and geometry is recommended.

#### Associate in Applied Science Construction Technology

Genera	l Educ	ation Requirements
ENGL	100	English Composition3 credits
ENGL	115	Introduction to Literature3 credits
MATH	145	College Algebra and Trigonometry4 credits
PHYS	110	Technical Physics & Lab4 credits
		Arts and Humanities Elective3 credits
		Social Science Elective3 credits
		Social Science or Humanities Elective
Major	Require	ed Courses
AEDD	100	Print Reading3 credits
AEDD	115	Basic Architecture Graphics3 credits
AEDD	255	Applied Engineering-Buildings
CONS	105	Tool Safety
CONS	115	Practical Building Concepts/Leveling3 credits
CONS	125	Framing Methods5 credits
CONS	135	Adv Roof Framing & Exterior Finish5 credits
CONS	145	Timber Framing & Interior Coverings
CONS	200	Kitchen Design and Millwork4 credits
CONS	210	Interior Finish & Stair Construction4 credits
CONS	216	Residential Contracting3 credits
CONS	220	Commercial Building Systems4 credits
CONS	230	Concreditsete Construction4 credits
OSHA	120	Construction Safety0.5 credits
		Total Credits Required for Degree: 68 credits

## Residential Framing Certificate

The Residential Framing Certificate program provides technical and extensive hands-on experience in light residential construction.

Upon completion of the Residential Framing Certificate, graduates will be able to:

- Design and build a single-family residence.
- Layout and build a timber-frame structure.

### Certificate

# Residential Framing

Require	Required Courses			
AEDD	100	Print Reading	3 credits	
CONS	105	Tool Safety	0.5 credits	
CONS	115	Practical Building Concepts/Leveling	3 credits	
CONS	125	Framing Methods	5 credits	
CONS	135	Adv Roof Framing & Exterior Finish	5 credits	
CONS	145	Timber Framing & Interior Coverings	3 credits	
ENGL	100	English Composition	3 credits	
MATH	145	College Algebra and Trigonometry	4 credits	
OSHA	120	Construction Safety	0.5 credits	
		Social Science or Humanities Elective	3 credits	
		Total Credits Required for Degree:	30 credits	

# **Criminal Justice**

The Criminal Justice program provides students with the skills and abilities they need to succeed in dynamic and rewarding criminal justice careers. Students will find career opportunities in law enforcement, forensics, corrections, probation/parole, private security and investigations, and juvenile and adult protective services.

The professional expertise of the faculty provides an important blending of academic accomplishment and practical experience. Students benefit from their professors' real world expertise in police patrol, investigations, evidence technology/forensics, crime scene reconstruction, drug and selective enforcement, supervision, management/leadership, corrections, and criminal prosecution. Career guidance and networking opportunities with criminal justice agencies and practitioners further enhance students' academic preparation and career success.

An internship program is offered to second year students who have maintained a 3.2 GPA. This one semester course offers students the experience of being an active part of a criminal justice, public safety, or social service agency. The Comparative Criminal Justice course features a one-week trip during the spring semester break to Ireland to compare their law enforcement systems with those of the United States. Two Crime Scene Reconstruction courses build on the Criminalistics course giving students substantial classroom, lab, and hands on experience in this rapidly evolving discipline. Service learning experiences are offered in selected criminal justice courses.

Upon completion of the Criminal Justice program, graduates will be able to:

- Demonstrate general knowledge of the structure, process, and relationships between law enforcement, the courts and correctional system.
- Compare and contrast the organization and practices of foreign law enforcement agencies to their American counterparts within the criminal justice system.
- Compare and contrast the juvenile justice and criminal justice systems in American society.
- Explain the Scientific Method as it applies to crime and incident scene reconstruction and analysis.
- Describe the essential laws and legal procedures that define and guide criminal justice practices in a democratic society, e.g. rules of evidence/laws of arrest, search and seizure.
- Identify, analyze and apply current best practices of law enforcement techniques.
- Understand, compare and contrast the prevailing theories of adult and juvenile criminal behavior in American society.
- Explain the historical and current perspective of the laws pertaining to arrest, search and seizure.
- Prepare a case for court presentation through use of appropriate information gathering techniques, report writing, pre-court preparation and proper courtroom procedure.
- Explain essential aspects of the community policing philosophy

### Criminal Justice Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra is recommended.

#### Associate in Applied Science Criminal Justice

Genera	General Education Requirements				
ENGL	100	English Composition	3 credits		
ENGL	115	Introduction to Literature	3 credits		
		Fine Arts or Humanities Elective	3 credits		
		Mathematics Elective	3 credits		
		Science Elective with Lab	4 credits		
		Social Science Elective	3 credits		
		Social Science or Humanities Elective	3 credits		

Major	Major Required Courses				
CJUS	105	Introduction to Criminal Justice	3 credits		
CJUS	115	Introduction to Criminology	3 credits		
CJUS	130	Laws of Arrest, Search, and Seizure	3 credits		
		Criminal Justice Electives	30 credits		
		Total Credits Required for Degree:	61 credits		

# **Culinary Arts**

As the third largest national industry and the largest in the state of Maine, the food industry estimates more than 60,000 additional chefs will be needed each year in the United States. SMCC's Culinary Arts program offers instruction in food preparation and service to supply these demands. The program curriculum covers all aspects of fundamental food preparation including meats, poultry, fish, vegetables, sauces, soups, bread and pastry baking, desserts, specialty cooking, dining room service, and more. Students may also participate in annual European study tours to Austria and Italy as program electives. Related instruction gives emphasis to management techniques, including inventory control, culinary mathematics, personnel and business management, bookkeeping, accounting and menu planning. General education with coursework in English, math, and social science, and a 400-hour externship rounds out the program. Opportunities for graduates are wide ranging in all areas of both direct food preparation and related management in the food service field.

#### Upon completion of the Culinary Arts program, graduates will be able to:

- Demonstrate the proper application of dry, moist, and combination cooking methods to a variety of food products and test those products for doneness.
- Demonstrate knife cuts and portion control.
- Demonstrate current Food Service sanitation procedures.
- Serve food according to professional industry standards.
- Calculate costs and apply procedures in order to run a cost effective foodservice establishment.
- Create menus that incorporate menu-planning principles that maximize sales and profits.
- Produce a variety of bakery products using standard baking procedures and evaluate the products based on method, timing, appearance, texture, cell structure and overall eating quality.

#### **Culinary Arts Admission Requirements**

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra is recommended.

#### Associate in Applied Science Culinary Arts

Genera	al Educ	cation Requirements	
ENGL	100	English Composition	3 credits
ENGL	115	Introduction to Literature	3 credits
PSYC	100	Introduction to Psychology	3 credits
NUTR	110	Normal Nutrition & Lab	4 credits
		Fine Arts or Humanities Elective*	3 credits
		Mathematics Elective	3 credits
		Social Science Elective	3 credits
Major	Requir	red Courses	
ACCT	105		3 credits
BUSN	255	Human Resource Management	3 credits
CULA	100	Introduction to Culinary Arts	3 credits
CULA	110		
CULA	120	Basic Food Preparation	4 credits
CULA	130	Basic Baking	4 credits

Food and Beverage Purchasing .......4 credits

**CULA** 

140

CULA	200	Culinary Arts Externship	3 credits
CULA	210	Buffet Preparation Techniques	4 credits
CULA	220	Advanced Cooking Specialties	4 credits
		Advanced Pastry and Baking	
CULA	240	Planning/Dining Room Service	4 credits
CULA	250	Food Service Management	3 credits
		Total Credits Required for Degree:	70 credits

It is recommended that students fulfill the Fine Arts or Humanities elective by taking Spanish I.

# **Dietetic Technology**

The mission of the Dietetic Technology program is to educate and train generalist dietetic technicians who possess both the skills and work habits to compete in the rapidly changing healthcare community. Graduates are prepared to work under the supervision of a registered dietitian in designing specialized diets, teaching healthy eating habits, and managing institutional food services and nutrition programs. The program combines classroom and laboratory work, as well as supervised clinical placements in area hospitals, nursing homes, school food services, and community health agencies.

Dietetic technicians work in a variety of settings including hospitals, nursing homes and other health-related facilities, subsidized feeding programs, weight control clinics, athletic training facilities, school nutrition programs and such government agencies as VISTA and the armed forces. Job opportunities outpace the number of graduates each year. Graduates are eligible for membership in the American Dietetic Association, to take the registration examination, to become a Dietetic Technician, Registered, and to become licensed in the State of Maine. Graduates who wish to pursue a baccalaureate degree may transfer with junior year status to the University of Maine – Orono's Human Nutrition Program.

### Program Goals and Outcomes:

The program will prepare students with skills necessary to provide food and nutritional care for diverse individuals and groups in a variety of employment settings.

- 80% of students who enter the program will complete the program within five years of matriculation.
- 80% of graduates will receive a "satisfactory" rating on their competency attainment as identified by employers.
- 80% of graduates seeking employment will report success in finding discipline-related employment within one year.
- The program will enable students who desire advanced study to transfer coursework to other institutions and also motivate students to become lifelong learners.
- 80% of graduates will evaluate their preparation as "satisfactory" or above on the competency-related statements from a graduate survey.
- 80% of graduates will indicate they believe the program prepared them to assume the responsibilities of their current position as "satisfactory" or better.
- Students who transfer to a four year college in Maine will transfer 90% of their courses with a grade of C or better.
- 80% of students will become members of the American Dietetic Association or other professional nutrition or food service organization.

#### Upon completion of the Dietetic Technology program, graduates will be able to:

- Use current technologies for information and communication.
- Document nutrition screenings, assessments and interventions.
- Participate in nutrition care of individuals across the lifespan and a diversity of people, cultures and religions.
- Supervise production of food that meets nutrition guidelines, cost parameters and consumer acceptance.
- Assist with nutrition assessment of individual patients/clients with complex medical conditions.
- Perform ethically in accordance with the values of the American Dietetic Association.

#### Dietetic Technology Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra and biology is recommended.

This program is granted Accreditation by the:

#### Commission on Accreditation for Dietetics Education of the American Dietetic Association

120 South Riverside Plaza, Suite 2000

Chicago, IL 60606.

800.877.1600 Extension 4872

# Associate in Science

#### Dietetic Technology

Genera	l Educa	ation Requirements
BIOL	100	General Biology & Lab4 credits
ENGL	100	English Composition3 credits
ENGL	110	Oral Communications3 credits
ENGL	115	Introduction to Literature3 credits
MATH	110	Contemporary Mathematics3 credits
NUTR	110	Normal Nutrition & Lab4 credits
PHIL	105	Ethical Dilemmas3 credits
PSYC	100	Introduction to Psychology3 credits
SOCI	100	Introduction to Sociology
		Science Elective with Lab
Major F	Require	ed Courses
BUSN	255	Human Resource Management3 credits
DIET	100	Introduction Dietetics Profession
DIET	110	Food and Beverage Purchasing3 credits
DIET	150	Principles of Food Preparation & Lb4 credits
DIET	155	Foodservice Systems Field Exp
DIET	160	Foodservice Sanitation
DIET	200	Health Care Delivery Systems3 credits
DIET	250	Nutrition Education and Counseling3 credits
DIET	255	Diet Seminar
DIET	275	Community Field Experience4 credits
DIET	280	Clinical Field Experience
NUTR	210	Intro to Medical Nutrition Therapy
		Business Elective
		Total Credits Required for Degree: 68 credits

# **Early Childhood Education**

The Early Childhood Education program is designed to prepare individuals as skilled Early Childhood professionals. Graduates will meet state licensing standards for teaching in a variety of settings. The coursework combines theory and practical experience to prepare graduates for immediate entry into the field or transfer to a four-year institution. In conjunction with the Early Childhood Education program, the Spring Point Children's Center provides quality educational experiences for preschool children, ages 3 to 5. This on-campus center is a valuable resource providing a laboratory setting for students in the program.

Upon completion of the Early Childhood Education program, graduates will be able to:

- Demonstrate an understanding of young children's typical and atypical characteristics based upon multiple influences on development and learning (birth – age 8).
- Apply theories of child development to plan inclusive, developmentally appropriate curriculum.

- Articulate priorities for the care of infants and toddlers in group settings.
- Create environments that are healthy, respectful, supportive and challenging for all children.
- Understand the value and importance children's families and cultural communities in shaping the development of the child.
- Create materials that reflect an understanding of the importance of early literacy and language rich environments.
- Develop respectful and reciprocal relationships with families that encourage families to be involved in their child's development and learning.
- Identify how community agencies and services support children, families, and providers.
- Demonstrate the skills of observation and recordkeeping as an inherent component of planning for the ongoing development of the child.
- Use the skills of positive guidance in their interactions with children based upon an understanding of the child's social/emotional development.

#### Early Childhood Education Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra, chemistry, and biology is recommended.

# Associate in Applied Science

# Early Childhood Education General Education Requirement

Genera	II Eauc	cation Requirements	
ENGL	100	English Composition3 cr	edits
ENGL	110	Oral Communications3 cr	edits
ENGL	115	Introduction to Literature3 cr	
MATH	110	Contemporary Mathematics3 cr	edits
NUTR	110	Normal Nutrition & Lab4 cr	
PSYC	100	Introduction to Psychology3 cm	edits
		Social Science Elective3 cm	edits
Major I	Require	red Courses	
ECED	100	Intro to Early Childhood Education*3 cr	edits
ECED	110	Child Development*3 cr	edits
ECED	150	Infant and Toddler Caregiving*3 cr	edits
ECED	160	Interactive Environments*3 cm	edits
ECED	175	Practicum/Seminar I*3 cm	edits
ECED	200	Childrens Literature & Language Art*3 cr	edits
ECED	210	Early Childhood Special Needs*3 cm	edits
ECED	220	Observation and Record Keeping*3 cr	edits
ECED	225	Practicum/Seminar II*4 cr	
ECED	250	The Developing Curriculum*3 cm	
ECED	260	Early Childhood Program Admin*3 cr	edits
ECED	270	School, Home, & Community Relationships *	edits
ECED	275	Practicum/Seminar III*6 cr	
		Total Credits Required for Degree: 65 cr	edits

\*To receive Departmental credit students must receive a grade of C or better in all Early Childhood Education courses

#### Certificate

#### Early Childhood Education

	Required Courses			
ECED	100	Intro to Early Childhood Education*		
ECED	110	Child Development*3 credits		
ECED	150	Infant and Toddler Caregiving*3 credits		
ECED	160	Interactive Environments*3 credits		
ECED	175	Practicum/Seminar I*3 credits		
ENGL	100	English Composition		

ENGL	115	Introduction to Literature	3 credits
MATH	110	Contemporary Mathematics	3 credits
		Normal Nutrition & Lab	
PSYC	100	Introduction to Psychology	3 credits
		Social Science Elective	
		Total Credits Required for Degree:	34 credits

<sup>\*</sup>To receive Departmental credit students must receive a grade of C or better in all Early Childhood Education courses

# **Electrical Engineering Technologies**

The Electrical Engineering Technology programs provide the education and training needed to install, maintain and troubleshoot electrical devices and equipment. Students explore topics such as basic circuits, wiring practices, electronics, programmable logic controllers, sensors, hydraulics, motors – devices and principles used in all manufacturing processes. In addition, students are exposed to the practice and regulations of residential and commercial wiring and renewable energy. An emphasis is placed on developing strong and logical troubleshooting skills.

Graduates are eligible to take the State of Maine Journeyman Electrician Exam. Two of the four years on-the-job training that is required for a Journeyman Electrician's license are awarded to graduates upon completing this program. No previous experience in electricity is required, but applicants should have a strong math and science background. Graduates find employment as an industrial electrician/technician for manufacturing companies, engineering assistant, technician with power or communication companies, residential and commercial electrical construction, electrical equipment sales, and many other related areas. Graduates of the associate degree program who wish to pursue a baccalaureate degree may transfer with junior year status to the University of Maine in Electrical Engineering Technology or Husson College in Business Administration.

Upon completion of an Electrical Engineering Technology program, graduates will be able to:

- Apply circuit analysis, design, and electrical principles to install, test, troubleshoot and maintain electrical and electronic systems.
- Work in the electrical field as an electrical technician or engineering assistant.
- Meet the educational requirements for various limited electrician licenses.
- Apply for the State of Maine Journeyman's Electrician Examination.
- Articulate into a four-year engineering degree program.

#### **Electrical Engineering Admission Requirements**

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra and physics is recommended.

# Associate in Applied Science Electrical Engineering Technologies

Electrical Engineering Technologies					
General Education Requirements					
ENGL	100	English Composition	3 credits		
ENGL	115	Introduction to Literature	3 credits		
PHYS	150	College Physics I & Lab	4 credits		
		Fine Arts or Humanities Elective	3 credits		
		Social Science Elective	3 credits		
Major I	Require	red Courses			
AEDD	105				
ELEC	110				
ELEC	120	Digital Electronics	3 credits		
ELEC	130				
ELEC	140	AC Circuits	3 credits		

ELEC	170	Three-Phase Circuits	s
ELEC	175	Wiring Practices3 credit	s
ELEC	215	Electrical Machinery3 credit	s
ELEC	230	Industrial Electronics	s
ELEC	240	Fluid Power Systems3 credit	s
ELEC	250	National Electrical Code	
ELEC	260	Motor Controls and Automation3 credit	s
ELEC	265	Renewable Energy Sources	t
ELEC	270	Electrical Communication Systems	
ELEC	275	Selected Electrical Topics	t
OPTIO	V I: ELE	CTRICAL TECHNOLOGY MATH 9 credits	
MATH	140	College Algebra3 credit	s
MATH	160	College Trigonometry3 credit	s
MATH	190	Pre-Calculus	s
OPTIO	V II: ELI	ECTRICAL ENGINEERING MATH 11 credits	
MATH	145	College Algebra and Trigonometry4 credit	s
MATH	190	Pre-Calculus3 credit	s
MATH	260	Calculus I	S
		Total Credits Required for Degree: 62-64 credit	s

#### Electrician Technology Certificate

The Electrician Technology program provides the educational courses the State of Maine requires for electrical licensing and will prepare you for exciting and well-paying work in the electrical trade. Circuits, devices and wiring practices will be examined in both the classroom as well as the lab. Students explore topics such as basic circuits, residential and commercial wiring practices, electronics, transformers and motors. It should be noted that this is a part-time evening program and it will take at least two years to complete. Graduation from this program will fulfill the education requirements of the State of Maine Journeyman and Master Electrician License as well as limited electrical licenses. Two of the four years on-the-job training that is required for a Journeyman Electrician's license are awarded to graduates upon completing this program.

Graduates find employment as industrial electrician/technician for manufacturing companies, residential and commercial electrician, electrical equipment sales, self-employed contractor and many other related areas.

Upon completion of the Electrician Technology Certificate, graduates will be able to:

- Install, test, maintain and troubleshoot electrical devices, circuits and systems.
- Sit for the State of Maine Journeyman Electrician Exam.
- Prepare and sit for other limited electrical license exams.

#### Certificate

# Electrician Technology

Require	Required Courses					
ELEC	105	Basic Electricity I	3 credits			
ELEC	115	Basic Electricity II	2 credits			
ELEC	150	Transformers	2 credits			
ELEC	160	Controls I	3 credits			
ELEC	205	Basic Electronics I	3 credits			
ELEC	210	Electrical Topics	3 credits			
ELEC	220	Electric Motors	2 credits			
ELEC	250	National Electrical Code	3 credits			
ELEC	255	Electrical Blueprint Reading	3 credits			
ELEC	280	Controls II				
ENGL	100	English Composition	3 credits			
MATH	145	College Algebra and Trigonometry	4 credits			
		Total Credits Required for Degree:	33 credits			

# **Emergency Medical Services/Paramedicine**

Paramedicine offers an exciting and challenging career within the field of Emergency Medical Services (EMS). Paramedics are members of the health care team that provides advanced level care in the pre-hospital environment under the direction of a physician. Employment opportunities are available with municipal and private ambulances, fire departments, hospitals, clinics, and in industrial settings.

Admission into the Paramedicine program requires that a student be a licensed Emergency Medical Technician (EMTB) for six months with 50 documented EMS calls. Existing paramedics may apply to have certain courses waived if working toward a degree.

Students gain entry-level competency in many new skills, including comprehensive patient assessment, endotracheal intubation, intravenous therapy, medication administration, cardiac rhythm interpretation, and defibrillation. Included in the curriculum (for additional fees) are certifications in ACLS (Advanced Cardiac Life Support), PALS (Pediatric Advanced Life Support), and PHTLS (Pre-hospital Trauma Life Support). The program meets or exceeds all requirements for the DOT National Standard Paramedic curriculum.

The clinical component of the program consists of approximately 700 hours of clinical time in a variety of settings including hospitals, medical facilities, and paramedic services. Students complete a portion of their field internship with a high volume EMS service in a major city.

#### Upon completion of the program, graduates will be able to:

- Perform a comprehensive assessment on a patient and communicate the findings to a physician.
- Demonstrate the ability to comprehend, apply and evaluate clinical information to implement the treatment plan for patients in the pre-hospital settings.
- Demonstrate technical proficiency in all pre-hospital skills including cardiac rhythm recognition, airway
  management and medication administration.
- Recognize that paramedics are an essential component of the continuum of care and service among health resources.

### **Emergency Medical Services Admission Requirements**

For information about Southern Maine Community College health science admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra, chemistry, and biology is recommended.

# Associate in Applied Science Paramedicine

G	enera	I Educ	ation Requirements	
В	IOL	130	Anatomy & Physiology I	3 credits
В	IOL	131	Anatomy & Physiology I Lab	1 credit
В	IOL	135	Anatomy & Physiology II	3 credits
В	IOL	136	Anatomy and Physiology II Lab	
В	IOL	235	Pathophysiology	3 credits
E	NGL	100	English Composition	3 credits
E	NGL	115	Introduction to Literature	3 credits
P	SYC	100	Introduction to Psychology	3 credits
N	1ATH	140	College Algebra	3 credits
			Fine Arts or Humanities Elective	3 credits
N	1ajor F	Require	ed Courses	
E	MSP	101	Introduction to Paramedicine	3 credits
E	MSP	110	Paramedic Procedures I	3 credits
E	MSP	150	Cardiology I	3 credits
E	MSP	160	Paramedic Procedures II	3 credits
E	MSP	161	Paramedic Procedures II Lab	
E	MSP	200	Clinical Practicum I	3 credits
E	MSP	205	Trauma Management	4 credits
E	MSP	210	Medical Emergencies I	4 credits

EMSP	215	Pediatric Emergencies	3 credits
EMSP	220	Advanced Cardiology	3 credits
EMSP	225	Medical Emergencies II	4 credits
EMSP	250	Clinical Practicum II	3 credits
EMSP	260	Assessment Based Management	2 credits
EMSP	265	Rescue Operations	
EMSP	270	Clinical Practicum III	
EMSP	275	Clinical Practicum IV	
EMSP	280	Paramedic Boards Review	1 credit
EMST	105	Ambulance Operations/AVOC	
HLTH	155	Pharmacology	3 credits
		Total Credits Required for Degree:	77 credits

# Fire Science Technology

The Fire Science Technology program, available at either the South Portland campus or our satellite campus at Eastern Maine Community College in Bangor, is designed to provide both pre-service and in-service students with sound technical and academic experiences, enabling them to assume positions of responsibility as members of fire departments or as technical and supervisory employees of industrial firms and insurance companies. The program focuses on developing skills in comprehensive approaches to fire protection that utilize cost-effective proactive, reactive and management methods. The ultimate goal is to assist the student to develop the appropriate skills and knowledge for professional fire protection. Fire Science Technology courses are available at off campus locations around the state. In addition to the associate in applied science degree, a one-year certificate option is available.

Practical technical instruction is designed to meet fire and life safety needs; responsibilities and obligation of fire protection in engineering, building design, plant protection; fire investigation; and all other fields where a hazard may be involved. The ultimate goal is to assist the student in developing the appropriate skills and knowledge for professional fire protection. Graduates of the program have been employed as wildland fire protection specialists, safety technicians, fire insurance inspectors, wildland fire fighters, inspection bureau representatives, and state fire inspectors, many of whom have earned their degree while employed in their area of specialty.

SMCC Fire Science curriculum follows the National Fire Academy's Fire and Emergency Higher Education (FESHE) collaborative recommendations as far as practicable. Course objectives are based on National Fire Protection Association (NFPA) Professional Qualification Standards and other occupational standards and recommended practices. Course credit is granted for prior learning, work experience and earned certifications.

Upon completion of the Fire Science Technology program, graduates will be able to:

- Analyze and apply proactive fire prevention and control methods for safe and cost effective fire protection.
- Analyze and apply reactive fire and emergency scene operations for safe and cost effective fire protection.
- Examine and appraise principles of supervision and management necessary for effective leadership and administration in fire/rescue service.

#### Fire Science Technology Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra, chemistry, and physics is recommended.

# Associate in Applied Science

Fire Science Technology

General Education Requirements				
CHEM	103	Chemistry for Emergency Responders 3 credits		
ENGL	100	English Composition3 credits		
ENGL	115	Introduction to Literature3 credits		
MATH	140	College Algebra3 credits		
PHYS	110	Technical Physics & Lab4 credits		
		Fine Arts or Humanities Elective		
		Social Science Electives6 credits		
Major F	Require	ed Courses		
FIRE	110	Fire Protection Systems3 credits		
FIRE	115	Fire Service Building Construction3 credits		
FIRE	150	Fire Inspector3 credits		
FIRE	155	Fire Service Hydraulics3 credits		
FIRE	200	Hazardous Materials3 credits		
FIRE	215	Fire Service Leadership3 credits		
FIRE	250	Fire Ground Operations3 credits		
FIRE	260	Fire Administration		
		Fire Science Electives		
		Total Credits Required for Degree: 61 credits		

# **General Technology**

General Technology recognizes that students can learn in many ways by offering the opportunity to earn credit for skills acquired through employment. Applicants for this program must have a minimum of four years of continuous work experience in an area of technical specialty related to one or more technology programs offered at the college. Students begin their application process by developing a portfolio which clearly outlines their work-related competencies. The department chair associated with the technical program of study will conduct a credit assessment of the portfolio and serve as an advisor to plan the remainder of the coursework required. Graduates in this program are usually employed in a variety of settings at the time of entry into the program.

# Associate in Applied Science

General Technology

General Technology						
Genera	General Education Requirements					
ENGL	100	English Composition	3 credits			
ENGL	115	Introduction to Literature	3 credits			
		Arts and Humanities Elective	3 credits			
		Mathematics Elective	3 credits			
		Science Elective with Lab	4 credits			
		Social Science Elective	6 credits			
Major	Require	ed Courses				
		Prior Learning Experience (Related to a specific trade)	24 credits			
		Trade Related Electives	24 credits			
		Total Credits Required for Degree:	61 credits			

# Heating, Air Conditioning, Refrigeration & Plumbing

The Heating, Air Conditioning, Refrigeration & Plumbing programs prepare students to install, repair and maintain refrigeration, heating and air conditioning equipment. Students learn about the components and construction of HVACR systems, temperature control, electronics, and how to read blueprints. This program incorporates a hands-on practical approach through work in the lab on HVAC equipment.

Graduates enter their field with skills and knowledge in basic electricity, heating and refrigeration systems and air conditioning systems, as well as the skills and competencies for journeyman plumbing. Special attention will be given to the integration of green technologies. Advanced courses develop more sophisticated design and application skills such as estimating thermal loads, hydronic piping design and controls for more complex circuits including digital. Heating, ventilation, air conditioning and refrigeration (HVAC/HVACR) technicians can work in private homes, commercial offices, industrial complexes, or any other type of building.

The Heating, Air Conditioning, Refrigeration & Plumbing department offers an associate in applied science degree with two options: Heating, Air Conditioning & Refrigeration, and Heating & Plumbing. The program also offers individual certificates in Plumbing, Heating, and Refrigeration & Air Conditioning. The program is designed to prepare students for entry level employment in the HVAC/Plumbing fields.

#### Heating, Air Conditioning & Refrigeration Option

Students with previous practical experience may be eligible for more advanced licenses. Students also take the EPA Technician Certification Exam and are eligible to take the ARI GAMA competency exams. Graduates are also eligible to take the State of Maine Natural Gas and Propane License Exam and the Journeyman's Exam for Oil Burners.

Upon completion of the Heating, Air Conditioning & Refrigeration program, graduates will be able to:

- Assemble warm air, steam and hot water system.
- Combustion test for maximum operating efficiency.
- Troubleshoot and repair electrical and fuel systems.
- Exhibit knowledge of installation code and safe work practices.
- Assemble, charge, and operate refrigeration and air conditioning systems.
- Troubleshoot and repair refrigeration and AC control systems.
- Recover, recycle and work safely with refrigerants.

#### Heating, Air Conditioning, & Refrigeration Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions.

#### Associate in Applied Science

#### Heating, Air Conditioning & Refrigeration

Genera	General Education Requirements					
ENGL	100	English Composition				
ENGL	115	Introduction to Literature	3 credits			
MATH	145	College Algebra and Trigonometry	4 credits			
PHYS	150	College Physics I & Lab				
PHYS	155	College Physics II & Lab	4 credits			
		Fine Arts or Humanities Elective	3 credits			
		Social Science Elective	3 credits			
Major f	Require	red Courses				
AEDD	100	Print Reading	3 credits			
ELEC	100	Basic Electrical Principles - HVAC				
ELEC	103	Basic Electronics for HVAC	3 credits			
HVAC	115	Residential Heating Systems	7 credits			
HVAC	120	Basic Refrigeration	7 credits			

HVAC	215	System Design & Industrial Heating	.7 credits
		Basic Air Conditioning	
		Introduction to Welding	
			64 crodits

#### Heating & Plumbing Option

Graduates of the Heating & Plumbing option are eligible to take the State of Maine Journeyman's Plumbing exam.

Upon completion of the Heating & Plumbing option, graduates will be able to:

- Assemble warm air, steam and hot water system.
- Combustion test for maximum operating efficiency.
- Troubleshoot and repair electrical and fuel systems.
- Exhibit knowledge of installation code and safe work practices.
- Design and layout a typical bathroom.
- Estimate time and materials for jobs.

#### Heating & Plumbing Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions.

# Associate in Applied Science

# **Heating & Plumbing**

Genera	General Education Requirements					
ENGL	100	English Composition				
ENGL	115	Introduction to Literature				
MATH	145	College Algebra and Trigonometry4 credits				
PHYS	150	College Physics I & Lab4 credits				
PHYS	155	College Physics II & Lab				
		Fine Arts or Humanities Elective				
		Social Science Elective3 credits				
Major I	Require	ed Courses				
CONS	160	Intro to Leveling Instruments				
ELEC	100	Basic Electrical Principles - HVAC3 credits				
ELEC	103	Basic Electronics for HVAC3 credits				
HVAC	115	Residential Heating Systems				
HVAC	215	System Design & Industrial Heating				
HVPL	100	Blueprint Reading and Sketching				
HVPL	105	Plumbing Application and Methods7 credits				
HVPL	205	Plumbing Application and Code				
OSHA	120	Construction Safety				
WELD	100	Introduction to Welding3 credits				
		Total Credits Required for Degree: 64.5 credits				

# Heating Certificate

The Heating, Air Conditioning, and Refrigeration Department offers a Certificate in Heating which also forms half of the Heating, Air Conditioning & Refrigeration option or the Heating & Plumbing option. The program provides technical and hands-on training emphasizing the practical knowledge and skills required to install and service commercial and residential heating systems. Graduates are also eligible to take the state of Maine Natural Gas and Propane License Exam and the Journeyman's Exam for Oil Burners.

Upon completion of the Heating Certificate program, graduates will be able to:

- Assemble warm air, steam and hot water systems.
- · Combustion test for maximum efficiency.

- Troubleshoot and repair electrical and fuel systems.
- Exhibit knowledge of installation code and safe work practices.

# Certificate

# Heatina

neuting						
Require	Required Courses					
AEDD	100	Print Reading	3 credits			
ELEC	100	Basic Electrical Principles - HVAC	3 credits			
ELEC	103	Basic Electronics for HVAC	3 credits			
ENGL	100	English Composition	3 credits			
HVAC	115	Residential Heating Systems	7 credits			
HVAC	215	System Design & Industrial Heating	7 credits			
MATH	145	College Algebra and Trigonometry	4 credits			
PHYS	150	College Physics I & Lab	4 credits			
WELD	100	Introduction to Welding	3 credits			
		Total Credits Required for Degree:	37 credits			

#### Plumbing Certificate

The one-year Plumbing Certificate program, which also forms half of the Associate in Applied Science degree option, is a study of the plumbing trade, residential and commercial, as practiced in the state of Maine. Blueprint reading and sketching for plumbers is covered, combined with working drawings, to learn the technique of sketching pipe layouts isometrically, and blueprint interpretation.

The proper use and safety methods of hand and power tools are covered as the course progresses. Mock-ups are used for actual piping and fixture layout, allowing students the opportunity to design, build and test plumbing installations. Graduates are eligible to take the State of Maine Journeyman's Plumbing exam.

Upon completion of the Plumbing Certificate program, graduates will be able to:

- Design and layout a typical bathroom.
- Line size and list pipe and fittings for the job.
- Estimate time and materials for jobs.

#### **Certificate** Plumbing

Required Courses					
CONS	160	Intro to Leveling Instruments	1 credit		
ELEC	100	Basic Electrical Principles - HVAC	3 credits		
ENGL	100	English Composition	3 credits		
HVAC	180	Heating Theory	3 credits		
HVPL	100	Blueprint Reading and Sketching	2 credits		
HVPL	105	Plumbing Application and Methods	7 credits		
HVPL	205	Plumbing Application and Code	7 credits		
MATH	145	College Algebra and Trigonometry	4 credits		
OSHA	120	Construction Safety	0.5 credits		
WELD	100	Introduction to Welding	3 credits		
		Total Credits Required for Degree:	33.5 credits		

#### Refrigeration & Air Conditioning Certificate

The Heating, Air Conditioning & Refrigeration Department offers a Certificate in Refrigeration & Air Conditioning which also forms half of the Heating, Air Conditioning & Refrigeration option or the Plumbing & Heating option. The program provides offers technical and hands-on training emphasizing practical knowledge and skills required to install and service all types of commercial and domestic air conditioning and refrigeration systems. Students may take ARI GAMA competency exams and EPA technician certification.

Upon completion of the Refrigeration and Air Conditioning Certificate program, graduates will be able to:

- Assemble, charge, and operate refrigeration and air conditioning systems.
- · Troubleshoot and repair refrigeration and air conditioning systems.
- Recover, recycle and work safely with refrigerants.

#### **Certificate**

Refrigeration & Air Conditioning

Required Courses				
AEDD	100	Print Reading	3 credits	
ELEC	100	Basic Electrical Principles - HVAC	3 credits	
ENGL	100	English Composition	3 credits	
HVAC	120	Basic Refrigeration	7 credits	
HVAC	220	Basic Air Conditioning	7 credits	
MATH	145	College Algebra and Trigonometry	4 credits	
PHYS	150	College Physics I & Lab	4 credits	
WELD	100	Introduction to Welding	3 credits	
		Total Credits Required for Degree:	34 credits	

# **Heavy Equipment Operations**

The Heavy Equipment Operations certificate program is designed to produce operators trained on earth-moving equipment such as bulldozers, backhoes, excavators, and graders. Training takes place both on lab simulators as well as on an actual lab operation site.

The program prepares graduates to work in county, state, or interstate highway construction, agricultural construction, airport development, and commercial and residential construction. The program utilizes a curriculum recognized by the National Center for Construction Education and Research (NCCER).

Graduates of this certificate program will be qualified to attain employment in the construction, gravel processing, farm operations, equipment dealers and heavy equipment service industries.

Upon completion of the Heavy Equipment Operations certificate, participants will be able to:

- Identify and practice safe work habits as required by OSHA and MSHA as a heavy equipment operator.
- Properly operate various pieces of heavy equipment.
- Properly perform light maintenance and service on various pieces of heavy equipment.
- Demonstrate knowledge of construction site operations.

#### Heavy Equipment Operations Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. A current, clean, and valid driver's license is required for admission to the Heavy Equipment Operations Certificate program. High school or post-secondary coursework in algebra is recommended.

### Heavy Equipment Operations

Require	Required Courses					
AUTO	155	Electricity and Electronics	4 credits			
ENGL	100	English Composition	3 credits			
HEOP	100	Construction Safety for HEOP	1 credit			
HEOP	115	Maintenance and Service	3 credits			
HEOP	130	Backhoe and Excavator (Sim Lab)	3 credits			
HEOP	145	Principles of Site Finishing & Grades	3 credits			
HEOP	160	Bulldozer and Excavator (Sim Lab)	3 credits			
HEOP	175	Heavy Equipment Operations Internship	4 credits			
MATH	145	College Algebra and Trigonometry	4 credits			
WELD	100	Introduction to Welding	3 credits			
		Total Credits Required for Degree:	31 credits			

# Horticulture

The Horticulture program prepares graduates to work in a wide variety of horticultural occupations, such as tree, shrub and perennial plant nurseries, arboreta, greenhouses, garden centers, landscape contracting and design, municipal parks, arboriculture, turf production, golf course management, lawn and grounds maintenance, florist shops, interior landscaping, estate gardening, cut flower production, herb and specialty plant production, market gardening, organic food production, horticultural equipment supplies and sales, and horticulture education. Many graduates own businesses and contribute significantly to their communities.

The Horticulture program is a hands-on, broad based curriculum, which provides or sponsors additional opportunities, including: tuition scholarships for students who qualify, educational field experiences, visiting lecturers with expertise in horticulture and related fields, and short courses that introduce students to specialized topics presented by members of the "green industry." Graduates from the horticulture program have successfully transferred credits toward baccalaureate degrees in related areas of study at a variety of colleges and universities.

Upon completion of Horticulture program, graduates will be able to:

- Understand and apply the basic principles of plant function and development, emphasizing horticultural
  applications.
- Identify and analyze soil properties as they relate to plant growth.
- Identify, use, and care for a wide variety of woody and herbaceous plants in the landscape and greenhouse.
- Demonstrate a basic understanding of landscape site analysis and landscape design using appropriate tools, techniques, skills, and knowledge.
- Identify common biotic and abiotic plant pests and disorders, and develop strategies to manage them in an environmentally safe and sustainable manner.
- Apply horticultural skills and knowledge to operate various business entities, including landscape, arborist, greenhouse, nursery, and turf management areas.

# Horticulture Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High school or post-secondary coursework in algebra, biology, and chemistry is recommended.

#### Associate in Applied Science Horticulture

norticulture					
General Education Requirements					
ENGL	100	English Composition			
ENGL	115	Introduction to Literature3 credits			
BIOL	115	Botany & Lab4 credits			
		Fine Arts or Humanities Elective3 credits			
		Mathematics Elective3 credits			
		Social Science Elective3 credits			
		Social Science or Humanities Elective3 credits			
Major f	Require	ed Courses			
HORT	100	Introduction to Horticulture & Lab			
HORT	110	Woody Plant Materials2 credits			
HORT	120	Pruning			
HORT	130	Soils and Soil Fertility3 credits			
HORT	140	Integrated Pest Management & Lab3 credits			
HORT	150	Arboriculture & Lab3 credits			
HORT	175	Placement Training4 credits			
HORT	180	Freshman Seminar			
HORT	200	Herbaceous Plant Materials			
HORT	210	Landscape Surveying and Mapping2 credits			
HORT	220	Landscape Management3 credits			
HORT	230	Nursery & Garden Center Operations3 credits			
HORT	240	Turfgrass Management			
HORT	250	Greenhouse Management & Lab3 credits			
HORT	280	Senior Seminar			
HORT	290	Landscape Design			
		Financial Accounting or Entrepreneurship I			
		Total Credits Required for Degree: 64 credits			

# **Integrated Manufacturing Technology**

The program offers a two-year associate degree program with options in Precision Machining and Precision Welding, as well as certificate in welding, and an Advanced Certificate in Multi-Axis Machining.

#### Precision Machining Concentration

Precision machinists control, design, maintain, upgrade and operate modern, computer-controlled production equipment and facilities equipment used to manufacture many of the world's goods. The Precision Machining program equips its graduates with an in-depth multi-disciplinary education in mathematics, physics, engineering technology, both manual and CNC machining, manufacturing processes and methods, as well as a broad education in computer studies, business and liberal arts. Our highly skilled graduates have gone on to provide hands-on engineering and managerial service in state-of-the-art high volume and/or high-precision manufacturing enterprises across Maine. Our graduates are currently employed in diverse industries including automotive, packaging, metalworking, power generation, aerospace, medical, defense, bottling and even private consulting companies. Our graduates specialize in precision machining with precision tool making using Computer Numerical Controller (CNC) programming and operations.

Upon completion of the Integrated Manufacturing Precision Machining program, graduates will be able to:

- Demonstrate knowledge and skills required to safely set up and operate conventional and CNC machines
  precision metalworking machinery.
- Demonstrate knowledge and skills required to safely machine precision parts.
- Demonstrate knowledge and skills required using CAM.
- Demonstrate knowledge and skills required to inspect machined parts using various measuring equipment and gauging.
- Demonstrate competency in general education requirements for work and life skills.

#### **Integrated Manufacturing Admission Requirements**

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High school or post-secondary coursework in algebra, physics, and geometry is strongly recommended.

### Associate in Applied Science Integrated Manufacturing

**Precision Machining Option** 

General Education Requirements				
ENGL	100	English Composition		
ENGL	115	Introduction to Literature		
MATH	145	College Algebra and Trigonometry4 credits		
PHYS	150	College Physics I & Lab4 credits		
		Fine Arts or Humanities Elective		
		Social Science Elective		
Major f	Require	ed Courses		
AEDD	105	CAD Graphics3 credits		
AEDD	170	Parametric Solid Modeling3 credits		
AEDD	250	Mechanical Design3 credits		
CMPT	101	Intro to Computer Applications3 credits		
MACH	105	Basic Machine Theory4 credits		
MACH	106	Basic Machine Lab3 credits		
MACH	155	Advanced Machine Theory4 credits		
MACH	156	Advanced Machine Lab		
MACH	205	Introductory CNC Machining Theory4 credits		
MACH	206	Introductory CNC Machining Lab3 credits		
MACH	255	CNC Programming: Solidworks & Camworks4 credits		
MACH	256	CNC Machining Lab3 credits		
MACH	275	Senior Internship		
WELD	100	Introduction to Welding3 credits		
		Total Credits Required for Degree: 66 credits		

#### Advanced Certificate in Multi-Axis Machining

The Advanced Certificate in Multi-Axis Machining is intended for students interested in pursuing either employment or an advanced degree in the rapidly growing field of Multi-Axis CNC machining. Students completing this advanced certificate will have acquired necessary machining skills and theoretical background for either employment or transfer to a baccalaureate degree in Industrial Technology or Applied Technical Education (precision manufacturing concentration),

Upon completion of the Advanced Multi-Axis Machining Certificate, graduates will be able to:

- Safely set up and operate multi-axis CNC machines.
- Safely operate support machinery.
- Program multi-axis machine tools.

- Demonstrate knowledge and skills required to inspect machined parts using various measuring equipment and gauging.
- Complete competency in general education requirements for work and life skills.

#### Advanced Multi-Axis Machining Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. Applicants to the Advanced Certificate must hold an AAS in Integrated Manufacturing or an equivalent degree or experience.

### Advanced Certificate Multi-Axis Machining

Mulu-Ax	Mutti-Axis Muchining					
Require	Required Courses					
AMAM	280	Multi-Axis CNC Programming	4 credits			
AMAM	285	Multi-Axis CNC Machining	4 credits			
AMAM	290	Advanced Material Machining				
AMAM	295	Advanced Workholding				
ITP	210	Technical Writing*	3 credits			
ITP	340	Fundamentals of Quality*	3 credits			
ITS	320	Occupational Safety and Health*	3 credits			
MATH	190	Pre-Calculus	3 credits			
MATH	230	Statistics				
MATH	260	Calculus I	4 credits			
		Total Credits Required for Certificate:	33 credits			

\*Offered through a partnership with the University of Southern Maine's School of Applied Science & Technology

#### Precision Welding Concentration

The Integrated Manufacturing Technology Precision Welding concentration offers a two-year associate degree program combining basic machining with welding. During the first year of the integrated manufacturing program, extensive lab work is combined with theory covering the topics of conventional machining: lathes, milling machines, surface grinders, drill presses, power metal cutting saws, layout, and bench work. Through the constant use of blueprints, students become proficient in conforming to industry expectations and program standards. The latest electronic equipment parallels the most modern quality control processes.

Second year students pursuing the Welding option will blend manual machining with a variety of welding processes, while acquiring a broad knowledge of metals, heat treatment, shop organization, lean manufacturing, and foremanship. Applicants with a significant amount of previous machining experience will be evaluated and assigned special projects appropriate to their demonstrated skill level to advance their knowledge and skills. Some of the job opportunities for graduates include: machine operator and setup person for conventional machining, welder, mill fabricator. Some graduates are self-employed.

#### Upon completion of the Precision Welding program, graduates will be able to:

- Identify and practice safe work habits of a welder in a weld shop, in a machine shop, and at industrial sites.
- Demonstrate knowledge and skills required to safely set up and operate conventional metalworking machinery.
- Describe the rules and processes required for state or employer structural welding.
- Demonstrate knowledge of the requirements for gas metal arc welding/flux core arc welding.
- Demonstrate knowledge of the requirements for gas tungsten arc welding.
- Demonstrate various processes of alloy welding.
- Demonstrate knowledge of welding defects and visual acceptance criteria in accordance with AWS D1.1; visual, liquid penetrant, magnetic particle testing.
- Demonstrate knowledge of carbon arc cutting and plasma arc cutting processes.
- Describe a product concept and business model concisely and persuasively.
- Make business decisions affecting customers, products, vendors, and investors with confidence.
- Prepare a business plan suitable for presentation to interested parties.

#### Integrated Manufacturing Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High school or post-secondary coursework in algebra, physics, and geometry is strongly recommended.

# Associate in Applied Science Integrated Manufacturing Precision Welding Ontion

Precision	Precision welding Option						
Genera	General Education Requirements						
ENGL	100	English Composition3 credits					
ENGL	115	Introduction to Literature3 credits					
MATH	145	College Algebra and Trigonometry4 credits					
PHYS	150	College Physics I & Lab4 credits					
		Fine Arts or Humanities Elective					
		Social Science Elective3 credits					
Major I	Require	ed Courses					
AEDD	105	CAD Graphics3 credits					
AEDD	250	Mechanical Design3 credits					
CMPT	101	Intro to Computer Applications3 credits					
MACH	105	Basic Machine Theory4 credits					
MACH	106	Basic Machine Lab3 credits					
MACH	155	Advanced Machine Theory4 credits					
MACH	156	Advanced Machine Lab3 credits					
MACH	275	Senior Internship or approved Technical Elective3 credits					
WELD	105	Structural Welding Theory4 credits					
WELD	106	Structural Welding Lab3 credits					
WELD	155	Advanced Welding Theory4 credits					
WELD	156	Advanced Welding Lab3 credits					
		Business Electives					
		Total Credits Required for Degree: 66 credits					

#### Welding Certificate

The one-year certificate program provides fundamental training in basic welding with a combination of welding processes. With the use of theory, lab and general education classes to prepare students for state and AWS welding certification tests.

Upon completion of the Welding Certificate, graduates will be able to:

- Identify and practice safe work habits of a welder in a weld shop, in a machine shop, and at industrial sites.
- · Describe the rules and processes required for state or employer structural welding.
- Demonstrate knowledge of the requirements for gas metal arc welding/flux core arc welding.
- Demonstrate knowledge of the requirements for gas tungsten arc welding.
- · Demonstrate various processes of alloy welding.
- Demonstrate knowledge of welding defects and visual acceptance criteria in accordance with AWS D1.1;
   visual, liquid penetrant, magnetic particle testing.
- Demonstrate knowledge of carbon arc cutting and plasma arc cutting processes.
- Describe a product concept and business model concisely and persuasively.
- Make business decisions affecting customers, products, vendors, and investors with confidence.
- Prepare a business plan suitable for presentation to interested parties.

#### Certificate Weldina

Welan	,						
Requir	Required Courses						
CMPT	101	Intro to Computer Applications	3 credits				
ENGL	100	English Composition	3 credits				
WELD	105	Structural Welding Theory	4 credits				
WELD	106	Structural Welding Lab	3 credits				
WELD	155	Advanced Welding Theory	4 credits				
WELD	156	Advanced Welding Lab	3 credits				
		Business Elective	3 credits				
		Mathematics Elective	3 credits				
		Total Credits Required for Degree:	26 credits				

### Liberal Studies

The Liberal Studies program is designed for students who plan to transfer to four-year colleges and universities or who have not yet identified a primary field of study. The curriculum is built on a foundation of general education classes, supplemented with elective courses that develop depth in the prerequisite knowledge required for further study at the baccalaureate level. Students are encouraged to choose elective courses in a discipline in which they may major at the baccalaureate level.

Please note: A student is only eligible to receive one Associate in Arts in Liberal Studies degree. S/he may not receive a second or subsequent degree in Liberal Studies with a different concentration.

#### Areas of Concentration

- Art
- Biological Sciences
- Mathematics
- Education (K-8)
- Education (7-12)
- English

- History
- Liberal Studies
- Political Science
- Psychology
- Science
- Social Work

#### Upon completion of the Liberal Studies program, graduates will be able to:

- Demonstrate skills as critical thinkers, readers and writers.
- Describe the interaction of history, culture, literature, economics and science as studied within a broad liberal arts curriculum.
- Analyze and solve quantitative problems.

#### Liberal Studies Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions.

IDST

Interdisciplinary Studies

#### Liberal Studies Subject Listing

Academic Success

The courses listed below are approved for use as Liberal Studies electives.

ARTS	Studio Art	LITR	Literature
ARTH	Art Appreciation and History	MATH	Mathematics
BIOL	Biology	MUSI	Music
BIOM	Marine Biology	NUTR	Nutrition (NUTR-110 only)
CHEM	Chemistry	OCEA	Oceanography (105 and 205)
ECON	Economics	PHIL	Philosophy
ENGL	English	PHYS	Physics
ENVR	Environmental Science	POLS	Political Science
FREN	French	PSYC	Psychology
GRMN	German	SOCI	Sociology
HIST	History	SPAN	Spanish
60			

ACSS

Courses that may be used as Liberal Studies electives, but are limited to a total of six (6) credits (no more than two courses total):

BHHS	Behavioral Health & Human Services	BUSN	Business
ECED	Early Childhood Education	EDUC	Education
CJUS	Criminal Justice	SWRK	Social Work

# Associate in Arts

Liberal Studies						
Genera	General Education Requirements					
ENGL	100		3 credits			
ENGL	115	The substitute of the substitu				
		Art or Music Elective				
		Economics or Political Science Elective				
		English Communications Elective	3 credits			
		Fine Arts or Humanities Elective	3 credits			
		History Elective				
		Humanities Elective	3 credits			
		Mathematics Elective				
		Psychology or Sociology Elective	3 credits			
		Science Elective with Lab	4 credits			
Major	Major Required Courses					
	•	Liberal Studies Electives	27 credits			
		Total Credits Required for Degree:	61 credits			

#### Art Concentration

The Liberal Studies: Art concentration is designed to prepare students for a career in the arts. Working in state-of-the-art studio facilities and guided by practicing professional art faculty, graduates from the program can go on to careers in studio art, illustration, graphic design, fashion, art education, arts advocacy and curatorial work in galleries and museums.

The foundation year is a hands-on studio program with a basis in traditional foundation courses of still-life and figure drawing, two-dimensional design, three-dimensional design and art history, in addition to Liberal Arts core courses. The program helps students to develop skills in a variety of art media, while gaining a balanced education through liberal studies and art history courses.

The second year focuses on studio practice in a specific media. Students enroll in a capstone course with their colleagues for group critiques, visits to museums, galleries and artist studios, presentations by guest art professionals, and the development of vital professional skills, such as portfolio presentation and small business management. In the studio, art students work closely with individual faculty advisors to develop a finished body of work for a group exhibition that culminates the program.

### Associate in Arts Liberal Studies Art Concentration

Genera	General Education Requirements				
ENGL	100	English Composition	3 credits		
ENGL	110	Oral Communications	3 credits		
ENGL	115	Introduction to Literature	3 credits		
		Fine Arts or Humanities Elective	3 credits		
		Art History Elective	3 credits		
		Economics or Political Science Elective	3 credits		
		History Elective	3 credits		
		Humanities Elective	3 credits		
		Mathematics Elective	3 credits		
		Psychology or Sociology Elective	3 credits		
		Science Elective with Lab	4 credits		

Major Required Courses				
ARTH	145	Survey of Western Art History I	3 credits	
ARTH	155	Survey of Western Art History II	3 credits	
ARTH	295	Portfolio Seminar	3 credits	
ARTS	110	Drawing I	3 credits	
ARTS				
ARTS	140	3D Design I: Sculpture Studio	3 credits	
ARTS	210	Drawing II	3 credits	
		Studio Art Elective	6 credits	
		Total Credits Required for Degree:	61 credits	

# Biological Science Concentration

The associate in arts degree in Liberal Studies with a concentration in Biological Sciences is primarily designed to transfer as the first two years of a four-year bachelor of science degree in biology. This curriculum will provide students with a solid background in biological science, plus additional science courses necessary to complete a more advanced degree.

# Associate in Arts Liberal Studies

**Biological Science Concentration** 

General Education Requirements		
ENGL	100	English Composition
ENGL	115	Introduction to Literature3 credits
MATH	145	College Algebra and Trigonometry4 credits
PHYS	150	College Physics I & Lab4 credits
		Arts and Humanities Elective
		Economics or Political Science Elective
		English Communications Elective3 credits
		Fine Arts or Music Elective3 credits
		History Elective
		Humanities Elective3 credits
		Psychology or Sociology Elective
Major Required Courses		
BIOL	210	Genetics
BIOL	211	Genetics Lab
BIOL	250	Microbiology with Lab5 credits
CHEM	120	General Chemistry I with Lab4 credits
CHEM	125	General Chemistry II with Lab4 credits
MATH	190	Pre-Calculus3 credits
MATH	230	Statistics
MATH	260	Calculus I4 credits
PHYS	155	College Physics II & Lab4 credits
		Biology I or Anatomy and Physiology I
		Biology II or Anatomy and Physiology II
		Biology I Lab or Anatomy & Physiology I Lab
		Biology II Lab or Anatomy & Physiology II Lab

# Elementary Education Concentration (K-8)

Total Credits Required for Degree:

The associate in arts degree in Liberal Studies: Education concentration prepares students to transfer to a baccalaureate program in education or liberal arts. The curriculum is built on a foundation of general education classes, supplemented with elective courses that focus heavily on relevant general education coursework with some specialization in the area of teacher education. Students are encouraged to choose elective courses in a discipline in which they may major at the baccalaureate level, such as English, mathematics, history, science, or other liberal arts disciplines.

74 credits

#### Associate in Arts

#### Liberal Studies

K-8 Education Concentration

K-0 Luuc	K-8 Education Concentration				
Genera	l Educa	ation Requirements			
ENGL	100	English Composition3 credits			
ENGL	115	Introduction to Literature3 credits			
PSYC	100	Introduction to Psychology3 credits			
PHIL	105	Ethical Dilemmas3 credits			
BIOL	100	General Biology & Lab4 credits			
MATH	140	College Algebra3 credits			
		Arts and Humanities Elective3 credits			
		Economics or Political Science Elective			
		English Communications Elective			
		Fine Arts or Music Elective			
		History Elective			
		ed Courses			
EDUC	100	Introduction to Teaching3 credits			
EDUC	200	Issues in American Education			
ENVR	115	Earth Science			
MATH	150	Math for Elementary Teachers3 credits			
MATH	200	Algebra for Elementary Teachers			
MATH	210	Geometry for Elementary Teachers			
PHYS	110	Technical Physics & Lab4 credits			
PSYC	220	Developmental Psychology3 credits			
		Liberal Studies Elective			
		Total Credits Required for Degree: 63 credits			

# Secondary Education Concentration (7-12)

The associate in arts degree in Liberal Studies: Education concentration prepares students to transfer to a baccalaureate program in education or liberal arts. The curriculum is built on a foundation of general education classes, supplemented with elective courses that focus heavily on relevant general education coursework with some specialization in the area of teacher education. Students are encouraged to choose elective courses in a discipline in which they may major at the baccalaureate level, such as English, mathematics, history, science, or other liberal arts disciplines.

#### Associate in Arts

# Liberal Studies

7-12 Education Concentration

Genera	General Education Requirements			
ENGL	100	English Composition3	credits	
ENGL	115	Introduction to Literature3	credits	
PSYC	100	Introduction to Psychology3	credits	
MATH	140	College Algebra3 o	credits	
		Arts and Humanities Elective3	credits	
		Economics or Political Science Elective3	credits	
		English Communications Elective3	credits	
		Fine Arts or Music Elective	credits	
		History Elective3	credits	
		Philosophy Elective	credits	
		Science Elective with Lab4 of	credits	

Major f	Major Required Courses		
EDUC	100	Introduction to Teaching	3 credits
EDUC	200	Issues in American Education	3 credits
PSYC	220	Developmental Psychology	3 credits
		Liberal Studies Electives	18 credits
		Total Credits Required for Degree:	61 credits

# English Concentration

The English concentration is offered for students interested in pursing a four-year degree in English a baccalaureate institution. The concentration provides for flexible course selection, allowing students to choose courses that best match the requirements of their desired transfer destination.

# Associate in Arts Liberal Studies

**English Concentration** 

Genera	al Educ	cation Requirements	
ENGL	100	English Composition	3 credits
ENGL	110	Oral Communications	3 credits
ENGL	115	Introduction to Literature	3 credits
		Arts and Humanities Elective	3 credits
		Economics or Political Science Elective	
		Fine Arts or Music Elective	3 credits
		History Elective	3 credits
		Humanities Elective	3 credits
		Mathematics Elective	3 credits
		Psychology or Sociology Elective	3 credits
		Science Elective with Lab	4 credits
Major	Require	red Courses	
		English Electives	6 credits
		Liberal Studies Electives*	11 credits
		Literature Electives	12 credits
		Total Credits Required for Degree:	63 credits

<sup>\*</sup>It is highly recommended that students fulfill a portion of their Liberal Studies electives by taking two semesters of the same foreign language (for instance, two semesters of French).

# History Concentration

The associate in arts degree in Liberal Studies with a concentration in History is designed to provide a foundation of study that prepares students to transfer to four-year colleges and universities. The curriculum is built on a foundation of general education classes, supplemented with history courses, other social sciences, and introductory foreign language study. This concentration is excellent preparation for a major in history at the baccalaureate level which could lead to careers in law, teaching, government, public relations, museum work and many other areas.

## Associate in Arts Liberal Studies

**History Concentration** 

Genera	General Education Requirements		
ENGL	100	English Composition	3 credits
ENGL	115	Introduction to Literature	3 credits
POLS	105	Introduction to American Government	3 credits
		Art or Music Elective	3 credits
		English Elective	3 credits
		Fine Arts or Humanities Elective*	3 credits
		Humanities Elective*	3 credits
		Mathematics Elective	3 credits
		Psychology or Sociology Elective	3 credits
		Science Elective with Lab	4 credits

	Major	Major Required Courses		
ſ	HIST	120	World History to 1500	3 credits
	HIST	125	World History since 1500	3 credits
	HIST	130	United States History to 1877	3 credits
	HIST	135	United States History Since 1877	
			History Electives	6 credits
			Liberal Studies Electives	
1			Total Credits Required for Degree:	61 credits

<sup>\*</sup>It is highly recommended that students fulfill the humanities electives by taking two semesters of the same foreign language (for instance, two semesters of French).

# **Mathematics Concentration**

The Mathematics concentration is intended for students with a strong foundation in mathematics who wish to continue their mathematics education at the bachelors degree level. This concentration is also appropriate for those students who wish to teach mathematics and plan to go on to a four-year education degree.

# Associate in Arts

# Liberal Studies

**Mathematics Concentration** 

Mathem	wathernatics concentration				
Genera	l Educ	ation Requirements			
ENGL	100	English Composition3 credits			
ENGL	110	Oral Communications3 credits			
ENGL	115	Introduction to Literature3 credits			
		Arts and Humanities Elective3 credits			
		Economics or Political Science Elective3 credits			
		Fine Arts or Music Elective3 credits			
		History Elective3 credits			
		Humanities Elective3 credits			
		Mathematics Elective3 credits			
		Psychology or Sociology Elective			
		Science Elective with Lab4 credits			
Major f	Require	ed Courses			
MATH	190	Precalculus3 credits			
MATH	230	Statistics3 credits			
MATH	260	Calculus I4 credits			
MATH	270	Calculus II4 credits			
		Liberal Studies Electives			
		Mathematics Elective			
		Total Credits Required for Degree: 63 credits			

# Political Science Concentration

The associate in arts degree in Liberal Studies with a concentration in Political Science is designed to provide a foundation of study that prepares students to transfer to four-year colleges and universities. The curriculum is built on a foundation of general education classes, supplemented with history and government courses, other social sciences, and introductory foreign language study. This concentration is excellent preparation for a major in political science at the baccalaureate level which could lead to careers in law, teaching, government, public relations, and many other areas.

#### Associate in Arts Liberal Studies

**Political Science Concentration** 

Genera	General Education Requirements			
ENGL	100	English Composition	3 credits	
ENGL	115	Introduction to Literature	3 credits	
	125	Macroeconomics	3 credits	
SOCI	100	Introduction to Sociology	3 credits	
		Art or Music Elective		

		English Elective	3 credits
		Humanities Elective*	
		Fine Arts or Humanities Elective*	3 credits
		Mathematics Elective	3 credits
		Science Elective with Lab	4 credits
Major	Require	ed Courses	
HIST	125	World History Since 1500	
HIST	130	United States History to 1877	3 credits
HIST	135	United States History Since 1877	3 credits
POLS	105	Introduction to American Government	
POLS	110	Introduction to International Relations	3 credits
POLS	205	Comparative Introduction to Political Science	3 credits
POLS	250	Introduction to Political Theory	
		Liberal Studies Electives	9 credits
		Total Credits Required for Degree:	61 credits

\*It is highly recommended that students fulfill the humanities electives by taking two semesters of the same foreign language (for instance, two semesters of French).

# Psychology Concentration

The Psychology concentration provides a comprehensive foundation in psychological theory and practice while also highlighting the social, political, and economic contexts that shape the psyche.

# Associate in Arts Liberal Studies

Psychology Concentration

	<u> </u>	
Genera	l Educa	ation Requirements
BIOL	130	Anatomy & Physiology I3 credits
BIOL	131	Anatomy & Physiology I Lab
ENGL	100	English Composition3 credits
ENGL	115	Introduction to Literature
MATH	140	College Algebra3 credits
SOCI	100	Introduction to Sociology
		Art or Music Elective
		Economics/Political Science Elective
		English Communications Elective3 credits
		Fine Arts or Humanities Elective
		History Elective3 credits
		Humanities Elective3 credits
Major F	Require	ed Courses
PSYC	100	Introduction to Psychology
PSYC	200	Abnormal Psychology3 credits
PSYC	220	Developmental Psychology
MATH	230	Statistics3 credits
		Psychology Electives
		Liberal Studies Electives6 credits
		Total Credits Required for Degree: 65 credits

# Science Concentration

The associate in arts degree in Liberal Studies with a concentration in Science is designed to provide a foundation of study that prepares students to transfer to four-year colleges and universities. The curriculum is built on a foundation of general education classes, supplemented with laboratory science courses, to develop depth in the prerequisite knowledge required for further scientific study at the baccalaureate level.

#### Associate in Arts

#### Liberal Studies

Science Concentration

Genera	LEduca	ation Requirements
ENGL	100	English Composition
FNGI	110	Oral Communications
FNGI	115	Introduction to Literature
MATH	140	College Algebra
1417 (111	1.0	Art or Music Elective
		Economics or Political Science Elective
		Fine Arts or Humanities Elective
		History Elective
		Humanities Elective 3 credits
		Psychology or Sociology Elective
		Science Elective with Lab
Major F	2001ira	ed Courses
CHEM		General Chemistry I with Lab
CHEM	125	General Chemistry II with Lab
	230	Statistics
PHYS	150	College Physics I & Lab
PHYS	155	College Physics II & Lab
PHIS	155	
		Biology I or Anatomy and Physiology I
		Biology II or Anatomy and Physiology II
		Biology I Lab or Anatomy & Physiology I Lab
		Biology II Lab or Anatomy & Physiology II Lab
		Biology II Lab or Anatomy & Physiology II Lab

#### Social Work Concentration

The associate in arts degree in Liberal Studies: Social Work concentration prepares students to transfer to a baccalaureate program in social work or human services. The curriculum is built on a foundation of general education classes, supplemented with elective courses that focus heavily on relevant general education coursework with some specialization. Students are encouraged to choose elective courses in a discipline in which they may major at the baccalaureate level.

# Associate in Arts Liberal Studies

Social Work Concentration

oodia: TT	ocial Work concentration			
Genera	General Education Requirements			
ENGL	100	English Composition3 credits		
ENGL	115	Introduction to Literature		
POLS	105	Introduction to American Government3 credits		
PSYC	100	Introduction to Psychology		
BIOL	100	General Biology & Lab4 credits		
MATH	140	College Algebra		
		Art or Music Elective3 credits		
		English Communications Elective		
		History Elective		
		Humanities Elective3 credits		
		Philosophy Elective		

Major I	Major Required Courses			
ECON	125	Macroeconomics	3 credits	
MATH	230	Statistics	3 credits	
PSYC	220	Developmental Psychology	3 credits	
SOCI	100	Introduction to Sociology	3 credits	
SWRK	100	Introduction to Social Work	3 credits	
SWRK	200	Introduction to Social Welfare	3 credits	
		Behavioral Health Electives	9 credits	
		Total Credits Required for Degree:	61 credits	

# **Lodging and Restaurant Management**

The Lodging & Restaurant Management program responds to the developing needs of the Maine hospitality and tourism industry by producing graduates qualified for introductory, supervisory, and management positions in the lodging and restaurant industry. SMCC is proud to operate the Peter A. McKernan Hospitality Center, a full service inn and conference center where Lodging and Restaurant Management students perform their required internship. This stunning oceanside center houses a 100-seat restaurant, overnight accommodations for 22, a full front desk, and numerous conference rooms. The relaxing atmosphere is the perfect spot for students-intraining to manage functions, training workshops and seminars, and private parties.

The Lodging and Restaurant Management program consists of a 160 hour externship program in the four most important departments of a hotel; concierge, front desk, events planning, and night audit. This is an unpaid program and our students shadow the current property employee that is covering those areas and departments. Students are also encouraged to join the local ACF chapter and to become a member of the SMCC Culinary Arts Team to compete in competitions. They are also encouraged to get involved in community charitable organizations and donate time whenever possible.

Upon completion of the Lodging & Restaurant Management program, graduates will be able to:

- Understand and deliver good customer service.
- Effectively communicate with customers and fellow employees.
- Recognize and apply interpersonal skills needed in hospitality management.
- Implement problem-solving techniques as they relate to day-to-day operations.
- Understand the complexities of operating a successful hospitality operation.
- With supervision, work in any of the hotel departments they have had courses in.

## Lodging & Restaurant Management Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High school or post-secondary coursework in algebra is strongly recommended.

#### Associate in Applied Science

Lodging & Restaurant Management

Genera	General Education Requirements				
ENGL	100	English Composition	3 credits		
ENGL	110	Oral Communications	3 credits		
		Introduction to Literature			
MATH	110	Contemporary Mathematics	3 credits		
NUTR	110	Normal Nutrition & Lab	4 credits		
		Social Science Electives	6 credits		

Major I	Major Required Courses			
ACCT	105	Financial Accounting	3 credits	
ACCT	155	Managerial Accounting	3 credits	
BUSN	100	Introduction to Business	3 credits	
BUSN	255	Human Resource Management	3 credits	
CMPT	101	Intro to Computer Applications	3 credits	
CULA	100	Introduction to Culinary Arts	3 credits	
CULA	110	Culinary Skills	4 credits	
CULA	120	Basic Food Preparation	4 credits	
CULA	250	Food Service Management	3 credits	
HSPM	125	Housekeeping Operations	3 credits	
HSPM	126	Housekeeping Operations Lab	1 credit	
HSPM	135	Front Office Operations		
HSPM	136	Front Office Operations Lab	1 credit	
HSPM	175	LRM Internship	3 credits	
HSPM	240	Hospitality Marketing	3 credits	
HSPM	245	Events Management	4 credits	
		Total Credits Required for Degree:	69 credits	

# Marine Biology and Oceanography

The Applied Marine Biology & Oceanography program provides students with the academic background and applied skills required for employment as research assistants and technicians in a variety of aquatic and environmental fields. The curriculum emphasizes hands-on laboratory and field procedures. Skills learned are commonly used by professionals working for companies and organizations involved in aquatic research and ecosystem management. Special attention is given to collecting and identifying a diversity of marine organisms, performing oceanographic sampling procedures aboard our own research vessel, service learning experiences in the southern Maine community, plus microbiology and chemistry laboratory techniques.

Many graduates of the program have found employment with public and private marine biology laboratories, state and federal marine-resource agencies, state and federal environmental protection agencies, environmental consulting firms, and water districts and pollution control facilities.

Upon completion of the Applied Marine Biology & Oceanography program, graduates will be able to:

- Communicate effectively, using the language, concepts and models of marine biology and oceanography.
- Use the methodology of marine biology and oceanography to define and solve problems independently and collaboratively.
- Use a wide variety of laboratory and field techniques with accuracy, precision and safety.
- Accurately interpret biological and oceanographic information.
- Demonstrate proficient library, mathematical and computer skills in data gathering and analysis.
- Apply scientific concepts to environmental and societal issues.
- Apply their learning in an off-campus professional setting.

## Applied Marine Biology & Oceanography Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions.

Applied Marine Biology & Oceanography

Genera	General Education Requirements				
BIOL	120	Biology I			
BIOL	121	Biology I Lab			
CHEM	120	General Chemistry I with Lab4 credits			
CHEM	125	General Chemistry II with Lab4 credits			
ENGL	100	English Composition3 credits			
ENGL	115	Introduction to Literature			
MATH	145	College Algebra and Trigonometry4 credits			
		Fine Arts or Humanities Elective			
		Social Science Elective			
Major F	Require	ed Courses			
BIOL	250	Microbiology with Lab5 credits			
BIOM	170	Invertebrate Zoology			
BIOM	180	Marine Botany with Lab4 credits			
BIOM	255	Ecology with Lab4 credits			
BIOM	265	Fishery Science with Lab4 credits			
OCEA	100	Elements of Nautical Science			
OCEA	105	Elements of Oceanography with Lab			
OCEA	125	Sea Time I			
OCEA	175	Sea Time II			
OCEA	205	Physical & Geological Oceanography4 credits			
OCEA	225	Sea Time III			
OCEA	275	Sea Time IV			
		Biology II and Lab or Statistics			
		Total Credits Required for Degree: 71-72 credits			

# **Medical Assisting**

The Medical Assisting program prepares students to perform duties and responsibilities in a variety of medical settings. The curriculum is flexible, allowing students to focus on different concentrations, including combined clinical and administrative skills, or administrative skills.

The duties of medical assistants are flexible and will vary depending on the type of office or work setting, but can include: drawing blood, administering injections, assisting with exams and surgical procedures, taking vital signs, direct patient care, performing electrocardiograms, patient education, telephone triage, receptionist skills, filing, insurance reimbursement and billing procedures, medical coding, correspondence and scheduling appointments.

The program culminates with a 160-hour Practicum during which theory learned in the classroom is applied in an actual medical practice environment.

Upon completion of the Medical Assisting program, graduates will be able to:

- Demonstrate competency performing entry-level administrative and clinical skills.
- Project a professional manner and maintain confidentiality.
- Demonstrate responsibility and flexibility.
- Communicate to all levels of patient education.
- Practice within the scope of education and abilities.
- · Follow state and federal legal guidelines for practice.

#### Medical Assisting Admission Requirements

For information about Southern Maine Community College health science admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High school or post-secondary coursework in algebra and biology is recommended.

## Associate in Applied Science Medical Assistina

Medicul	ASSIS	ung
Genera	l Educ	ation Requirements
BIOL	130	Anatomy & Physiology I
BIOL	131	Anatomy & Physiology I Lab
BIOL	135	Anatomy & Physiology II3 credits
BIOL	136	Anatomy & Physiology II Lab
CMPT	101	Introduction to Computer Applications3 credits
ENGL	100	English Composition
ENGL	115	Introduction to Literature3 credits
PSYC	100	Introduction to Psychology3 credits
PSYC	220	Developmental Psychology3 credits
MATH	110	Contemporary Mathematics3 credits
		Fine Arts or Humanities Elective
Major I	Require	ed Courses
MDAS	100	Medical Terminology3 credits
MDAS	105	Medical Office Procedures3 credits
MDAS	110	Introduction to Medical Assisting
MDAS	150	Disease Pathology/Diagnostic Lab Tests3 credits
MDAS	160	Intro Clinical Office Procedures
MDAS	205	Billing Procedures & Administration
MDAS	225	Computer Apps - Medical Office3 credits
MDAS	250	Medical Ethics and Law3 credits
MDAS	260	Medical Office Administration
MDAS	275	Medical Assisting Practicum4 credits
HLTH	155	Pharmacology
OPTIO	N I: CLI	NICAL & ADMINISTRATIVE OPTION
MDAS		Clinical Office Procedures3 credits
MDAS	211	Advanced Clinical Office Lab Procedures
OPTIO	V II: AL	DMINISTRATIVE OPTION
CMPT	151	Spreadsheet Applications3 credits
		Total Credits Required for Degree: 63-65 credits

# Nursing

The nursing program prepares students to become registered nurses at the associate degree level and trains them to administer nursing care to individuals, families and communities in a variety of health care settings. Upon completion of the program, graduates are eligible to take the NCLEX Registered Nurse (RN) licensure examination.

The curriculum blends nursing courses with general education courses to provide a sound theoretical base for nursing practice. Clinical experiences are concurrent with didactic experiences during the four semesters.

Upon completion of the Nursing program, graduates will be able to:

- Systematically apply the nursing process to provide care to clients in a variety of health care settings.
- Demonstrate client-centered caring behaviors and actions that result in an environment of hope and trust.
- Adhere to professional behaviors within the legal, ethical, and professional standards of practice.

# **Nursing Admission Requirements**

For information about Southern Maine Community College health science admission requirements, visit the Admissions area of the website http://www.smccme.edu/admissions.

\*To progress to the next course in the nursing sequence, students must receive a grade of C (75) or better. Students are allowed one repeat attempt in the duration of their program.

The Maine State Board of Nursing may refuse to grant a license on the basis of the criminal history record information relating to convictions denominated in Title 5, Chapter 341, Section 5301, Subsection 2 of the Maine Revised Statutes Annotated (MRSA).

The nursing program at SMCC is approved/accredited by:

# **Maine State Board of Nursing**

161 Capitol Street 158 State House Station

Augusta, Maine 04333-0158 Telephone: 207-287-1133

http://www.state.me.us/boardofnursing

# National League for Nursing Accreditation Commission (NLNAC)

3343 Peachtree Road, NE – Suite 500 Atlanta, Georgia 30326

Telephone: 404-975-5000 Fax: 404-975-5020

www.nlnac.org

E-mail: nlninform@nln.org

#### Associate in Science

Nursing

Genera	General Education Requirements			
ENGL	100	English Composition	•	
ENGL	115	Introduction to Literature	- 1	
PSYC	100	Introduction to Psychology		
BIOL	130	Anatomy & Physiology I		
BIOL	131	Anatomy & Physiology I Lab	:	
BIOL	135	Anatomy & Physiology II		
BIOL	136	Anatomy and Physiology II Lab	:	
BIOL	250	Microbiology with Lab5 credits	;	
		Fine Arts or Humanities Elective3 credits	;	
		Social Science Elective3 credits	;	
Major I	Require	ed Courses	ı	
NURS	100	Dosage Calculations		
NURS	125	Nursing I	;	
NURS	175	Nursing II9 credits	:	
NURS	225	Nursing III	:	
NURS	275	Nursing IV	:	
PSYC	220	Developmental Psychology	;	
		Total Credits Required for Degree: 68 credits		

## LPN Upgrade Option

## Associate in Science

#### Nursing

LPN Upgrade Option

Genera	General Education Requirements			
BIOL	130	Anatomy & Physiology I3 credits		
BIOL	131	Anatomy & Physiology I Lab		
BIOL	135	Anatomy & Physiology II3 credits		
BIOL	136	Anatomy and Physiology II Lab		
BIOL	250	Microbiology with Lab5 credits		
ENGL	100	English Composition3 credits		
ENGL	115	Introduction to Literature3 credits		
PSYC	100	Introduction to Psychology3 credits		
		Fine Arts or Humanities Elective3 credits		
		Social Science Elective3 credits		

Major	Major Required Courses			
NURS	100	Dosage Calculations	1 credit	
NURS	110	Transition to the ADN Role	3 credits	
NURS	175	Nursing II	9 credits	
NURS	225	Nursing III	9 credits	
NURS	275	Nursing IV	9 credits	
PSYC	220	Developmental Psychology	3 credits	
		Total Credits Required for Degree:	62 credits	

# **Radiation Therapy**

Each year more than a million newly diagnosed cases of invasive cancer are reported in the United States, and approximately 50 percent of those who have cancer will receive radiation therapy. As medical and technological advances combine to improve cancer detection and treatment, the therapeutic and palliative effects of radiation therapy will continue to play a crucial role for these patients. The radiation therapy program utilizes rapidly evolving technology with a combination of radiation therapy and general education courses. Solid clinical foundation with selected medical centers in the area and an emphasis on independent decision-making and critical-thinking skills will challenge students.

Multiple curriculum options exist. Students may enter the two-year associate degree option with or without transfer credit. A 12-15 month advanced standing option is available for radiographers and other applicants who meet special eligibility requirements. Others may choose to pursue a baccalaureate degree in radiation therapy. Upon completion of the program, graduates are eligible to apply to take the certification examination of the American Registry of Radiologic Technologists (ARRT).

Upon completion of the program, graduates will be able to:

- Be a competent, entry-level radiation therapist.
- Possess knowledge, skills, and attitudes necessary to effectively communicate and educate patients, their families, and the public about radiation therapy.
- Apply critical thinking skills required of an entry-level radiation therapist.
- Seek a position in the medical community with other qualified, entry-level radiation therapists.
- Participate in professional development and in professional organizations related to cancer management.

## Radiation Therapy Admission Requirements

For information about Southern Maine Community College health science admission requirements, visit the Admissions area of the website at http://www.smccme.edu/admissions. High School or post-secondary coursework in algebra, physics and biology is recommended.

## Associate in Science Radiation Therapy

Genera	General Education Requirements			
BIOL	130	Anatomy & Physiology I	3 credits	
BIOL	131	Anatomy & Physiology I Lab	1 credit	
BIOL	135	Anatomy & Physiology II	3 credits	
BIOL	136	Anatomy and Physiology II Lab	1 credit	
ENGL	100	English Composition	3 credits	
ENGL	115	Introduction to Literature	3 credits	
MATH	140	College Algebra	3 credits	
PSYC	100	Introduction to Psychology	3 credits	
		Fine Arts or Humanities Elective	3 credits	

Major	Major Required Courses			
RDTH	100	Medical Terminology		
RDTH	105	Introduction to Radiation Therapy3 credits		
RDTH	120	Clinical Practicum I		
RDTH	135	Radiographic Anatomy I		
RDTH	140	Principles & Practice of Radiation Therapy I		
RDTH	141	Principles & Practice of Radiation Therapy I Lab		
RDTH	160	Clinical Practicum II		
RDTH	165	Radiographic Anatomy II		
RDTH	170	Radiation Physics4 credits		
RDTH	180	Clinical Practicum III		
RDTH	210	Principles & Practice of Radiation Therapy II4 credits		
RDTH	215	Physician's Lecture Series		
RDTH	220	Clinical Practicum IV		
RDTH	225	Treatment Planning & Dosimetry4 credits		
RDTH	230	Basic Clinical Dosimetry		
RDTH	235	Radiation Cell Biology3 credits		
RDTH	240	Clinical Practicum V6 credits		
RDTH	245	Radiation Quality Assurance Lab		
RDTH	260	Clinical Practicum VI		
RDTH	295	Radiation Therapy Registry Review		
		Total Credits Required for Degree: 89 credits		

# Radiography

The radiographer, a vital member of the health care team, utilizes sophisticated x-ray equipment to obtain diagnostically valuable images of any body part. In order to perform radiographic procedures, the radiographer must have a good working knowledge of not only human anatomy and radiographic procedures, but also radiation physics, principles of imaging, radiation protection, and quality assurance. Employment opportunities include hospitals, private offices and outpatient clinics, and specialties such as mammography, computerized tomography, vascular and interventional radiography, and magnetic resonance imaging. The curriculum maintains clinical affiliations with many hospitals in southern Maine, as well as several orthopedic offices in Portland.

This program prepares individuals to become radiographers at the associate degree level. Upon completion of the program, graduates are eligible to apply to take the certification examination of the American Registry of Radiologic Technologists, ARRT.

Upon completion of the Radiography program, graduates will be able to:

- Perform radiographic examinations on pediatric, adult and elderly individuals who present with a variety of challenges.
- Utilize a variety of radiographic and image processing equipment in a variety of clinical settings.
- Utilize appropriate radiation protection techniques for patients and personnel.
- Deliver appropriate patient care in a variety of clinical situations.
- Demonstrate attention to clerical detail relative to all aspects of clinical examinations, including archiving, filing and retrieval of images.
- Interact professionally and competently with other health care personnel.
- Communicate to patients the basic procedural details of special imaging modalities such as interventional angiography, mammography, CT and MRI.
- Be eligible to apply for the American Registry of Radiologic Technologists' examination in diagnostic radiography.

## Radiography Admission Requirements

For information about Southern Maine Community College health science admission requirements, visit the Admissions area of the website http://www.smccme.edu/admissions. High school or post-secondary coursework in chemistry, physics, and algebra is highly recommended and biology is required. All students accepted undergo a criminal background check. Results of the background check are made available to all clinical facilities. If a student is denied access to any of our clinical facilities, he/she will be unable to continue in the program.

# Associate in Science Radiography

Muulogi	upny			
Genera	General Education Requirements			
BIOL	130	Anatomy & Physiology I3 credits		
BIOL	131	Anatomy & Physiology I Lab		
BIOL	135	Anatomy & Physiology II		
BIOL	136	Anatomy and Physiology II Lab		
ENGL	100	English Composition3 credits		
ENGL	115	Introduction to Literature3 credits		
MATH	140	College Algebra3 credits		
PSYC	100	Introduction to Psychology		
		Fine Arts or Humanities Elective3 credits		
Major I	Require	ed Courses		
RADG	100	Introduction to Health Sciences		
RADG	105	Radiographic Procedures I4 credits		
RADG	115	Radiographic Exposure3 credits		
RADG	130	Clinical Practicum I		
RADG	155	Radiographic Procedures II4 credits		
RADG	160	Clinical Practicum II		
RADG	175	Radiographic Analysis I		
RADG	190	Clincal Practicum III		
RADG	205	Radiographic Procedures III		
RADG	215	Radiographic Exposures II		
RADG	230	Clinical Practicum IV6 credits		
RADG	235	Applied Physics for Radiography3 credits		
RADG	245	Radiographic Pathology3 credits		
RADG	255	Principles of Quality Assurance		
RADG	260	Clinical Practicum V6 credits		
RADG	275	Radiographic Analysis II		
RADG	290	Clinical Practicum VI		

\*Inability to meet clinical objectives and a clinical grade of less than 85 or a radiographic didactic course grade less than 75 constitutes failure in that course.

# **Respiratory Therapy**

Total Credits Required for Degree:

Respiratory Therapy is an Allied Health specialty involved with evaluation, treatment, management, diagnosis and preventive care of patients with cardiopulmonary problems. The respiratory therapist is a life-support specialist. During emergency calls, which often indicate a life-and-death situation of cardiac and/or pulmonary arrest, respiratory therapists become responsible for life support of the patient through airway management, artificial ventilation, external massage and other sophisticated emergency support measures. Therapists must be efficient in many areas of specialized and therapeutic respiratory care, such as oxygen, humidification, aerosols, positive pressure breathing, cardiopulmonary resuscitation, mechanical ventilation, airway management, pulmonary function studies and blood gas analysis. With the ever-increasing number of cardiopulmonary disorders and the advancement in respiratory therapy and specialty areas, job opportunities in this dynamic and challenging profession are rapidly expanding. The program is run in close cooperation with clinical affiliates,

including Maine Medical Center and Mercy Hospital in Portland; St. Mary's Regional Medical Center and Central Maine Medical Center in Lewiston; Southern Maine Medical Center in Biddeford; and Mid Coast Hospital in Brunswick.

Upon completion of the Respiratory Therapy program, graduates will be able to:

- Demonstrate cognitive behavior in the clinical setting consistent with a therapist-level Respiratory Care Practitioner.
- Exhibit psychomotor skills in the clinical setting consistent with a therapist-level Respiratory Care Practitioner.
- Demonstrate attitudes and behaviors, in the clinical setting consistent with a therapist-level Respiratory Care Practitioner.

## Respiratory Therapy Admission Requirements

For information about Southern Maine Community College health science admission requirements, visit the Admissions area of the website http://www.smccme.edu/admissions. High school or post-secondary coursework in chemistry, biology, physics, and algebra is recommended.

Associate in Science Respiratory Therapy

Genera	l Educa	ation Requirements	
BIOL	130	Anatomy & Physiology I	
BIOL	131	Anatomy & Physiology I Lab	
BIOL	135	Anatomy & Physiology II	
BIOL	136	Anatomy and Physiology II Lab	
BIOL	235	Pathophysiology3 credits	
CHEM	120	General Chemistry I with Lab4 credits	
ENGL	100	English Composition3 credits	
ENGL	115	Introduction to Literature	
MATH	140	College Algebra3 credits	
		Fine Arts or Humanities Elective	
		Social Science Elective3 credits	
Major F	Require	ed Courses	
RESP	100	Respiratory Therapy Patient Care	
RESP	101	Gas, Humidity, and Aerosol Therapy with Lab4 credits	
RESP	105	Pulmonary Assessment Technology with Lab3 credits	
RESP	110	Airway Management with Lab3 credits	
RESP	115	Applied Physics for Health Sciences	
RESP	120	Cardiopulmonary-Renal Anat & Phys3 credits	
RESP	125	Clinical Practicum I	
RESP	150	Microbiology for Patient Care	
RESP	160	Pharmacology	
RESP	170	Intro to Mechanical Ventilation with Lab2 credits	
RESP	175	Clinical Practicum II	
RESP	200	Neonatology and Pediatrics	
RESP	210	Cardiovascular Assessment	
RESP	220	Clinical Mechanical Ventilation with Lab3 credits	
RESP	225	Clinical Practicum III	
RESP	250	Critical Respiratory Care3 credits	
RESP	275	Clinical Practicum IV6 credits	
		Total Credits Required for Degree: 82 credits	

# Surgical Technology

A certified Surgical Technologist (CST) is a member of the surgical team in the operating room who works with the surgeon, anesthesiologist and certified registered nurse, delivering direct patient care before, during and after surgery. Surgical technologists perform functions and tasks that provide a safe environment for surgical care and contribute to the efficiency of the operating team by supporting operating surgeons, nurses and others involved in operative procedures. Surgical technologists also work in other patient service settings that call for special knowledge about asepsis, or about methods of making or keeping an environment antiseptic.

The program is a cooperative effort between SMCC and the Maine Medical Center (MMC) in Portland. The first year of the program is a one-year, self-contained surgical technology program provided by MMC. First semester classes are held on the SMCC campus, including basic sciences, care and safety of the patient, and principles of operating room technique. Second semester classes are held at MMC, enabling the student to gain practical experience in the operating room, participating in clinical rotations to several ambulatory surgery sites to maximize the student's clinical experience. Graduates are prepared and eligible to sit for the National Certification Examination offered by the Liaison Council of Certification.

Upon completion of the MMC surgical technology program, students can apply to the SMCC associate degree program for a second year of study. The associate degree enhances career opportunities through vertical mobility, practitioner levels refinement, and maximized employment prospects. Upon acceptance to the associate degree program, the candidate is awarded 45 credits advanced standing that serve as the technical core of the associate degree. SMCC then requires a minimum of 22 general education and allied health credits to meet degree requirements. Transfer students should be aware that SMCC requires 15 credits of curriculum-specific coursework be taken at SMCC in order to award a degree. Transfer credits do not count toward this 15-credit minimum.

The MMC School of Surgical Technology is fully accredited by the American Medical Associations Committee on Allied Health Education and Accreditation. SMCC is fully accredited as a post-secondary educational institution by the New England Association of Schools and Colleges.

# Upon completion of the program, graduates will be able to:

- Provide safe care to the patient in a surgical setting.
- Function as an integral part of a surgical team.
- · Perform good aseptic technique.
- · Practice as a surgical technologist in multiple clinical settings.
- Work in related medical settings such as research, infection control and medical sales.
- Sit for the national certification examination for surgical technologists.

#### Surgical Technology Admission Requirements

For information about Southern Maine Community College health science admission requirements, visit the Admissions area of the website http://www.smccme.edu/admissions. High school or post-secondary coursework in chemistry, biology, physics, and algebra is recommended. All first-year applications are processed through the MMC School of Surgical Technology. For information and application, please call 207-741-5589 or email spaterson@smccME.edu or paters@mmc.org.

# Associate in Applied Science

Surgical Technology

Surgicul Technology					
General Education Requirements – minimum of 15 credits to be taken at SMCC					
ENGL	100	English Composition	3 credits		
ENGL	115	Introduction to Literature	3 credits		
PSYC	100	Introduction to Psychology	3 credits		
		Fine Arts or Humanities Elective	3 credits		
		Mathematics Elective	3 credits		
		Science Elective with Lab	4 credits		
		Social Science Elective	3 credits		

Total Credits Required for Degree:

66-68 credits

# **Trade and Technical Occupations**

The associate in applied science in Trade and Technical Occupations program is designed to recognize the proficiency of people who are enrolled in, or have completed, a registered apprenticeship program (e.g., journey person status).

Women and men who have completed or are currently enrolled in a registered apprenticeship program or a formal program approved by the College may apply and simultaneously complete both their training program and degree requirements.

A registered apprenticeship program is one approved by the Maine State Apprenticeship and Training Council or the U.S. Department of Labor, Bureau of Apprenticeship and Training. Six credits per year of apprenticeship are allowed. Students earning less than twenty four credits will need to complete remaining credits in related or open electives.

## Trade and Technical Occupations Admission Requirements

For information about Southern Maine Community College admission requirements, visit the Admissions area of the website http://www.smccme.edu/admissions. Prospective students must be currently enrolled in a registered apprenticeship program or a formal program approved by the college and related to a degree program offered by the college.

# Associate in Applied Science

Trade & Technical Occupations

Trade & Technical Occupations					
General Education Requirements					
ENGL 100	- 0····				
ENGL 115	Introduction to Literature	3 credits			
	Fine Arts or Humanities Elective	3 credits			
	Mathematics Elective	3 credits			
	Physics Elective	4 credits			
	Social Science Elective				
	Social Science or Humanities Elective	3 credits			
Major Required Courses					
	Trade Related Electives	22 credits			
	Trade and Technical Occupations Electives	24 credits			
	Total Credits Required for Degree:	68 credits			

# COURSE DESCRIPTIONS

Accounting Courses (ACCT)

# ACCT 105 Financial Accounting

3 cr.

This is an introductory course that prepares a student to become skilled at basic accounting procedures, with the intent of accurately presenting financial information for decision-making The material is vital for all participants in business. Students will learn about balance sheets, income measurement, recording processes involving journals and ledgers, and the accounting cycle. Students will also examine the major elements of financial statements such as cash accounts receivables, inventories, long-term assets, liabilities, and equity. Financial statement analysis occurs throughout.

Prerequisite(s): MATH-020 Corequisite(s): none

ACCT 155 Managerial Accounting

3 cr.

Building on fundamentals learned in Financial Accounting, students are introduced to several important analytical tools found in business Topics include the time value of money, the concept of risk, budgeting, costing of products, master and flexible budgeting, debt management, and short-term business decisions. A solid basis in financial accounting will be necessary.

Prerequisite(s): ACCT-105, MATH-050

Corequisite(s): none

ACCT 205 Intermediate Accounting 3 cr.

This course is the intensive study of accounting and the use of financial information for business decision making This course is a continuation of the basic accounting principles and theories covered in Financial Accounting and Managerial Accounting. Intermediate Accounting is also a further introduction of accounting as a career profession.

Prerequisite(s): ACCT-105, MATH-050

Corequisite(s): none

Academic Success Courses (ACSS)

#### ACSS 104 Academic Success Seminar 3 cr.

This is a three-unit course Each unit is five weeks. Unit I: Academic Skills for College Success introduces students to the college environment and provides opportunities to strengthen skills necessary for success at the college level. Unit II: Learning Theories and Self-Assessment explores the learning process, learning styles, and student development theory. Unit III: Career Decision Making helps students understand

and successfully manage, through readings, writing, and activities, some of their life and career transitions.

Prerequisite(s): none Corequisite(s): none

Advanced Multi-Axis Machining Courses (AMAM)

AMAM 280 Multi-Axis CNC Programming 4 cr.

This course compliments AMAM-285 Multi-Axis CNC Machining. Emphasis is on advanced multi-axis computerized numerical control (CNC) programming of CNC milling machines and CNC lathes. Students will work on process development. This course is designed for the student who holds an AAS degree in Integrated Manufacturing Technology of equivalent or has significant CNC machining experience.

Prerequisite(s): Program acceptance

Corequisite(s): AMAM-285

#### AMAM 285 Multi-Axis CNC Machining 4 cr.

This lab complements the theory taught in AMAM-280 Multi-Axis CNC Programming. Students will apply skills reviewed in AMAM-280 including: programming of CNC milling machines and CNC lathes, machine set-up planning, machining of parts and process development. Development of best work practices including safe work habits, building student confidence, and advanced CNC machining skills will be emphasized. This course is designed

for the student who holds an AAS degree in Integrated Manufacturing Technology or equivalent or has

significant trade experience.

Prerequisite(s): Program acceptance

Corequisite(s): AMAM-280

#### AMAM 290 Advanced Material Machining 3 cr.

This course emphasizes advanced material machining. Students will study the mechanical, chemical and thermal properties of materials including metals, alloys, ceramics, polymers and composites. Labs will include tooling, fabrication, machining, assembly, quality assurance, and repair of various materials. Development of best work practices including; safe work habits, building student confidence and advanced machining skills will be emphasized. This course is designed for the student who holds an AAS degree in Integrated Manufacturing Technology or equivalent or has significant CNC machining experience.

Prerequisite(s): AMAM-280, AMAM-285

Corequisite(s): none

3 cr.

3 cr.

This course emphasizes workholding systems for machining of advanced materials. Students will explore advanced techniques used to hold high precision components and advanced materials for precision machining to assure quality. Students will evaluate and utilize hydraulic, pneumatic, modular, and manual clamping devices to design, build, and qualify technical workholding fixtures. Students will explore, design, and build a workholding device. This course is designed for the student who holds an AAS degree in Integrated Manufacturing Technology or equivalent or has significant CNC machining

Prerequisite(s): AMAM-280, AMAM-285, AMAM-290 Corequisite(s): none

Architectural & Engineering Design Courses (AEDD)

#### AEDD 100 Print Reading 3 cr.

This course introduces the concepts of technical drawing, measurement, scale, format, and how they are applied to reading drawings in the fields of mechanical, architectural, civil, structural, and electrical. The relationship between the intent of the drawings, trade practices, ASME standards, and the ability to extract and utilize information found on various kinds of drawings will be stressed.

Prerequisite(s): MATH-020 Corequisite(s): none

experience.

#### AEDD 105 CAD Graphics

This course will involve the production of 2D technical drawings that meet industry standards using AutoCAD software. Emphasis will be placed on precision and accuracy, use of symbols, line types, line weights, orthographic projection, multi-view placement, text format, dimensions, section views, auxiliary views, isometric views, and plotting accuracy. A variety of design fields will be reviewed with an emphasis on ASME graphics standards.

Prerequisite(s): MATH-020 Corequisite(s): none

# AEDD 115 Basic Architecture Graphics 3 cr

This course offers the fundamentals of architectural design as it relates to light wood construction consistent with, but not limited, to residential construction. Designed for the student without prior CAD experience, this course introduces building elements, building code requirements, and professional and regional influences.

Prerequisite(s): MATH-020 Corequisite(s): none

# AEDD 135 Civil Design

3 cr.

This course in civil engineering design will provide a broad based introduction to the principles of civil engineering and landscape architecture. Topics covered will include land survey and description, topography and profiles, location plan design, site planning and subdivision layout, and landscaping. Adherence to industry standards, drawing accuracy, layout, and quality of work will be stressed.

Prerequisite(s): AEDD-105 Corequisite(s): none

# AEDD 140 Interior Design

3 cr.

This course will introduce students to interior design, beginning with an historical overview of the profession. Topics will include space planning, color theory, ADA compliance, furnishings, materials, lighting, CAD applications, continuing education and the certification process. There will be a series of required projects that will include research and self-exploration.

Prerequisite(s): MATH-020 Corequisite(s): none

# AEDD 160 CAD Applications

3 cr.

3 cr.

This course will be based on AutoCAD software. Students develop drawings in a variety of fields of design, including architectural, civil, mechanical, and others. Emphasis will be placed on improving efficiency, advanced layout techniques, annotative scales, plotting, solving problems when working with existing drawings, creating hybrid vector-raster drawings, developing symbols and templates, and using software to solve design problems.

Prerequisite(s): AEDD-105 Corequisite(s): none

# AEDD 165 Basic Architecture with CAD 3 cr.

This CAD based course offers the fundamentals of architectural design as it relates to light wood construction consistent with, but not limited, to residential construction. Designed for the student with prior drafting and CAD courses, this course introduces building elements, CAD techniques, building code requirements, and professional and regional influences.

Prerequisite(s): AEDD-105 Corequisite(s): none

#### AEDD 170 Parametric Solid Modeling

This course introduces students to the use of SolidWorks or Inventor software to produce parametric models, assemblies, and drawings for the manufacturing industry. Topics will include sketches,

reference planes, relations, part modeling techniques, constraints, mates, evaluation tools, redesign, and presentation techniques. Each student will complete an individual design project involving a mechanical assembly with appropriate documentation.

Prerequisite(s): AEDD-105 Corequisite(s): none

#### AEDD 175 Kitchen Design

3 cr.

This is an in-depth course covering the aspects of kitchen design and layout. Industry specific software will be used to generate graphics. Presentation techniques of the design solutions using both CAD and illustration will be covered.

Prerequisite(s): AEDD-100 Corequisite(s): none

#### AEDD 185 Civil CAD

3 cr.

This comprehensive course covers the fundamental tools of CivilCAD and their practical applications in planning, documenting, and creating roadways, subdivisions, and site plans with adherence to industry standards. Understanding and using the software, generating design concepts, drawing accuracy, layout and quality of work will be stressed.

Prerequisite(s): AEDD-105 Corequisite(s): none

#### AEDD 190 Interior Architecture Studio I 3 cr.

This studio will be based on commercial interior architecture and will be taught through synthesis of concepts with site and building conditions. Design development will consist of translation of schematic exploration into: form and space; programming; and space planning. Each student will complete a set of conceptual drawings that include floor plans, reflective ceiling plans, lighting plans, floor pattern plans, elevations, mill work sections, finish schedule, and material boards.

Prerequisite(s): AEDD-140 Corequisite(s): none

#### AEDD 205 Technical Illustration 3 cr.

This comprehensive course covers technical and perspective forms of three-dimensional drawing, one and two point perspective, shade and shadow, color, and rendering. Extensive sketching, a thorough understanding of technical drawing/graphic concepts, and hands-on experience promote the development of artistic talent as it relates to architectural engineering design.

Prerequisite(s): AEDD-100 or AEDD-105

Corequisite(s): none

#### AEDD 210 CAD 3D

3 cr.

This is a survey course in 3D modeling using a variety of currently used modeling software. Students will produce multiple projects using selected acis and parametric modeling software. Rendering and animation software will be used to produce presentations of the models created.

Prerequisite(s): AEDD-160 Corequisite(s): none

## AEDD 215 Residential Architecture

3 cr.

Design/planning procedures and presentation techniques presented in AED-165 will be expanded and coordinated into a complete residential design project The project shall conform to code and demonstrate functional, energy, and environmental considerations.

Prerequisite(s): AEDD-115 or AEDD-165

Corequisite(s): none

## AEDD 216 Sustainable Design

3 cr.

This course introduces the student to the concepts of green design and construction in residential and commercial projects. The course is presented in modules which will cover sustainable design elements. Presentation of current green technologies will be provided by the instructor through the use of text, mixed media and lectures. Local and global applications of green design will be analyzed, discussed and critiqued.

Prerequisite(s): AEDD-100 or AEDD-105

Corequisite(s): none

#### AEDD 220 Architectural BIM

3 cr.

Students will use architectural software widely used in the field to produce architectural models and working drawings. Building information management, design development, construction documentation and planning techniques as they relate to the software will be emphasized.

Prerequisite(s): AEDD-165 or AEDD-115 and AEDD-105

Corequisite(s): none

#### AEDD 240 Building Systems

3 cr.

This course provides an overview of the systems needed in buildings with an emphasis on applicable codes and green design. Topics will include electrical system design and code compliance, basic homeowner wiring practices, heat calculations, heating systems, municipal and rural water systems, plumbing system design and codes, site planning, and Leadership in Environmental and Energy Efficient Design (LEED).

Prerequisite(s): AEDD-115 or AEDD-165

Corequisite(s): none

# AEDD 250 Mechanical Design

3 cr.

AEDD 290 AutoLisp Programming

3 cr.

This course provides an overview of the elements of mechanical design that are used in manufacturing industries. Topics will include ASME Y14.5 standards of technical graphics, geometric dimensioning and tolerancing (GDT), classes of fit, surface finishes, weld callouts, representation of fasteners, characteristics of materials, power transmission, and development of working drawings. Students may submit work using appropriate 2D or parametric CAD drawings.

Prerequisite(s): AEDD-105 Corequisite(s): none

# AEDD 255 Applied Engineering-Buildings 3 cr.

This course is a non-calculus introduction to the combined study of mechanics and strength of materials as it relates to building construction using Allowable Stress Design methods. Up to date values in wood, laminates/composites, steel and engineering applications are covered. It is intended for architects, builders, carpenters, designers, and code enforcement officers requiring only a background in algebra. This is a comprehensive basic engineering course with a focus on proper material selection.

Prerequisite(s): MATH-140 Corequisite(s): none

#### AEDD 260 CAD Management

3 cr.

This course will provide an introduction to the management of AutoCad using the current version of the software. Students will learn advanced techniques in geometry creation, management of CAD systems, development of macros, use of scripts, programming for automation, customizing the software's interface, updating multiple drawings, managing externally referenced files, and other management tools.

Prerequisite(s): AEDD-160 Corequisite(s): none

#### AEDD 265 Commercial Architecture 3

This advanced course in architectural planning and presentation for commercial structures and applications introduces the student to client interaction, planning a renovation, rehabilitation, or a new design, generating a set of plans and part of a specification in preparation for work assisting an architect/engineer. Current codes, Barrier Free Design, and design elements will be discussed.

Prerequisite(s): AEDD-115 or AEDD-165

Corequisite(s): none

This course provides students an opportunity to use the AutoLISP and Visual Basic programming languages to develop applications for automating the use of AutoCAD. Proficiency with AutoCAD is necessary for success, as this course is designed for the very competent AutoCAD user. Topics will include creation of new functions, command creation, using the VLISP editor, managing variables, looping functions, association table manipulation, and an introduction to objects, properties, classes, and methods in VBA.

Prerequisite(s): AEDD-160 Corequisite(s): none

Anthropology Courses (ANTH)

# ANTH 105 Intro to Cultural Anthropology 3 cr.

This course explores the diverse ways in which people organize and give meaning to their existence and the social, political and economic contexts in which they do so. We examine how structures of power and social relations over time shape inequalities by studying anthropological methods and perspectives. Our goal is to understand two common components in anthropological inquiry: 1) the ways in which human beings are differentiated, via history, geography, and culture differentiates such as subsistence patterns, kin relations, and social stratification, and 2) what human beings share across those boundaries.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

Art History and Appreciation Courses (ARTH)

#### ARTH 105 Introduction to Visual Art 3 cr.

The class serves as an introduction to the world of visual art. Through the use of a unique thematic approach we will explore topical threads that cross cultural and historical boundaries, leading from cave drawings to the present. Each class will feature a different inspirational theme: memory, structure, humor, etc.; which will be explored through presentations, readings, writings, field trips, and studio projects in a variety of different media. This course is designed for students with little or no experience in visual arts and is not recommended for students who intend to enroll in the Art Concentration.

Prerequisite(s): none Corequisite(s): none

#### ARTH 125 Visual Art and Society

This course will explore the many facets where Visual Art and Society collide though lecture, discussion, film and hands-on art making. Topics such as revolution, humanism, dissidents, and public art will be viewed with a global approach through historical and contemporary lenses. Students will develop fundamental art concepts and skills through projects such as creating public art models, photo documentary, and independently guided projects.

Prerequisite(s): none Corequisite(s): none

# ARTH 135 Documentary Photography 3 cr.

From the faded black and white photographs of the Civil War battlefield to the digital images on online newspapers and magazines, the stillness of a photograph remains a powerful influence on how we view the world. In this course students will focus on documentary photography, examining the works of photographers who have mastered this fine art of visual storytelling. Through readings, films, slide shows, and fieldwork, students will gain a better understanding of the medium. The class will explore and emulate different areas of social documentary, photo essays, photojournalism, and visual narrative. This course also invites students to question the context, purpose, and point of view of photographs. In addition, this is a hands-on photography class open to students of varying skills. Photographic processes both film and digital will be discussed, but shooting assignments will require a digital camera. Students will learn digital image editing and work on a semesterlong photo documentary project: A photo essay of a chosen subject in the community.

Prerequisite(s): none Corequisite(s): none

#### ARTH 145 Survey of Western Art History I 3 cr.

Survey of Western Art History is a two-semester sequential survey of Western Art History with a concentration on artistic developments in the context of history, culture, and institutions, as well as visual analysis and technical knowledge. On completion of this course, students will have a basic knowledge of the development of Western Art History, be able to identify and discuss broad topics within the history of art, and relate these studies to studio coursework. Part I covers the following topics: Prehistory, Egypt & the Ancient Near East, the Ancient Aegean, Etruscan, Greek & Roman, Early Christian & Byzantine, Early Medieval, Romanesque & Gothic.

Prerequisite(s): none Corequisite(s): none

#### ARTH 155 Survey of Western Art History II 3 cr.

Survey of Western Art History is a two-semester sequential survey of Western Art History with a concentration on artistic developments in the context of history, culture, and institutions, as well as visual analysis and technical knowledge. On completion of this course, students will have a basic knowledge of the development of Western Art History, be able to identify and discuss broad topics within the history of art, and relate these studies to studio coursework. Part II covers the following topics: Late Gothic, Italian & High Renaissance, Mannerism & Northern Renaissance, Southern Baroque, Northern Baroque, Rococo, Neoclassical, Romanticism, Realism, Impressionism & Post-Impressionism, and Modern & Contemporary Art.

Prerequisite(s): ARTH-145 Corequisite(s): none

# ARTH 215 History of 20th Century Art 3 cr.

This History of 20th Century Art course is a study and evaluation of the development of Modern Art and Artists. We will trace and uncover the evolution of influences, themes, traditions and contradictions within historical, social, political, technological and religious contexts. Class lectures will include image presentations, movie/film screenings, visiting artists, active discussion, writing exercises, museum and gallery visits. Topics to be covered will include Multimedia, Video Art, Photography, Junk Sculpture, Happenings, Architecture, Installation, Assemblage and Environments, Social Realism, Pop Art, Op Art, Urban Art, Regionalism, Surrealism, Dada, the Bauhaus, de Stijl, Constructivism, Expressionism, Futurism, Fauvism, Cubism, and more as time allows.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

# ARTH 225 World Art

This survey of Non-Western art and architecture serves as an introduction to the visual cultures of Asia, Oceania, Africa, and Native North and South America. This course will give an overview of the stylistic development and cultural context of the historical artistic production of Non-Western cultures around the world. Themes which unite these various cultures will be discussed, including the ornament of architecture, the importance of visual aids in ceremony and ritual, the creation and use of masks, connection to the landscape, the development of writing methods, and the continuation of art-making traditions. The course will include a focus on those cultures that continue to have some relation on modern and contemporary art history.

3 cr.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### ARTH 295 Portfolio Seminar

3 cr.

In the Portfolio Seminar students work to develop artwork and professional materials that meet their individual goals. In addition to ongoing critiques of student work, the class will focus on the development of professional skills, including photographing artwork, building a web presence, and developing of resumes, artist statements and cover letters. Students will learn to research and apply for exhibitions, residencies, grants, and jobs within the art field, and explore contemporary issues in art through readings, discussions, and visits to galleries, museums and studios. The course will also feature guest critiques and lectures by local artists and curators. The seminar culminates with a student exhibition, artist talk, and the presentation of a thesis paper. The Portfolio Seminar is required for graduation from the Art Concentration.

Prerequisite(s): ARTH-145, 155, ARTS-130, 140, 210 Corequisite(s): none

Studio Art Courses (ARTS)

#### ARTS 110 Drawing I

3 cr.

This class will teach the fundamentals of observational drawing, beginning with the basic elements: line, shape, gesture, value and composition, and advancing to the use of non-traditional materials and the origination of creative ideas through class projects, journal-keeping, and looking at art. Field trips to local museums and galleries will enhance the students' ability to put their own studio work in the context of the greater art world. The role of visual art as a tool for communication and expression will be explored.

Prerequisite(s): none Corequisite(s): none

#### ARTS 120 Ceramics I

3 cr.

This course is an introduction to ceramics class that will give students the basic skills to create work in clay. The students will learn hand building, wheel-throwing and glazing techniques, in addition to learning about the history of clay and the different methods of firing that have evolved over time. This course will be held at Portland Pottery, located at 118 Washington Ave in downtown Portland. Students will be responsible for purchasing a required supply kit consisting of tools and clay. The supplies will be pre-packaged and sold directly to students at Portland Pottery on the first day of class.

Prerequisite(s): none Corequisite(s): none

#### **ARTS 129 Drawing on Nature**

3 cr.

Explore the oceanfront grounds of the SMCC campus during its most radiant time of year and take on the

artistic challenges that working from nature presents: changing light, weather and tides, capturing movement and change, working quickly from life, completing outdoor works inside, etc. Students will be encouraged to develop a personal means of artmaking, such as strict observational realism, expressionism, abstraction or conceptual. A variety of media and working methods will be explored including pencil, ink, watercolor, gouache, mixed media and more. Open to students with some drawing or painting background who are interested in building their confidence and abilities in working from nature.

Prerequisite(s): none Corequisite(s): none

#### ARTS 130 2D Design

3 cr.

The objective of this class is to examine two-dimensional design as a cornerstone for further studies in art. We live in an increasingly visual world and the elements of design can be found in organic and manufactured structures all around us. Through detailed study of design concepts, presentations, group critiques, field trips and the creation of compositions in cut paper, marker, acrylic paint, colored pencil, collage and ink, we will learn to create artwork that is unified and effective in concept, form and purpose and learn how design principles are practically applied every day, from websites to airplanes to handbags. Students will master the verbal and visual vocabulary essential for success in their chosen field of visual expression.

Prerequisite(s): none Corequisite(s): none

# ARTS 140 3D Design I: Sculpture Studio

3 cr.

This course introduces the fundamentals of threedimensional design and will ask students to construct and question visual relationships. Emphasis will be on developing an understanding of the basic elements of design: line, plane, volume, mass, movement, shape, form, space, value, texture and color. We will look closely at design organizational principles such as proportion, repetition, rhythm, emphasis, balance, symmetry and hierarchy. A range of materials (paper, cardboard, clay, plaster, wire and found object) and processes (constructing, modeling, carving, casting and fabricating) will be utilized to introduce a variety of approaches to 3D problem solving. Students will also be introduced to three-dimensional critical vocabulary where focus will be on communicating ideas and forming distinctions and connections through verbal and written formats. This class is open to all levels and from all departments within the college community.

Prerequisite(s): none Corequisite(s): none

#### ARTS 147 Papermaking: Surface and Structure 3 cr.

In this introductory studio class, students will learn traditional techniques of basic sheet forming, laminating, watermarking, embedding sheets with both organic and found/industrial patterns, and image making with pulp painting. Students will collect local plant samples as well as prepare and use dried Asian fibers from Japan, Philippines, Thailand, and Nepal to create translucent yet strong sheets of handmade papers for a variety of uses such as drawing surface, printmaking, book arts, collage, and light structures. Studens will also be introduced to fibers such as cotton, flax, sisal, and abaca, as well as learn how to transform recycled paper into a vocabulary of handmade sheets and forms. During this course, students will explore several sculptural approaches of working with handmade paper forms that focus on mass and volume without weight. Construction of dimensional sculptural forms will be achieved through the following techniques: paper pulp spraying onto fabric, screening, wire forms, and assembled found object; paper casting into plaster mono molds and ready-made molds to produce multiples and editions, and direct hollow fabrication, Students will learn how to translate a design from clay to plaster and into paper.Papermaking is a full 3 credit course with an intense pace of learning, discovery, exploration, and production. Students will read a variety of handouts on the methods of historic papermaking and contemporary uses. Slide lectures, videos, and samples of contemporary practice will be included, as well as information on setting up a functioning home paper studio. Experienced or beginning students are welcomed.

Prerequisite(s): none Corequisite(s): none

#### ARTS 148 Structural Papermaking

During this intense week of preparing and producing sheets of Asian fibers for handmade papermaking, students will explore several sculptural approaches of working with handmade paper forms that focus on mass and volume without weight. Construction of dimensional sculptural forms will be achieved through the following techniques: paper pulp spraying onto fabric, screening, wire forms, and assembled found objects create unified "skin" over an armature - pulp spraying can also produce large, thin sheets of textured paper; paper casting into plaster mono molds and ready-made molds produce multiples and editions - students will learn how to translate a design from clay to plaster and into paper; paper fabrication will allow students to work with already dried sheets to construct hollow, dimensional forms. Students will read a variety of handouts on the methods of historic papermaking and contemporary uses. Slide lectures,

videos, and samples of contemporary practice will be included as well as information on setting up a functioning home paper studio.

Prerequisite(s): none Corequisite(s): none

# ARTS 149 Botanical Papermaking 3 cr.

In this course students will collect local plant samples as well as use and prepare dried Asian fibers from Japan, Philippines, Thailand, and Nepal to create translucent yet strong sheets of handmade papers for a variety of uses such as drawing surface, printmaking, book arts, collage, and light structures. Students will learn traditional techniques of basic sheet forming, producing laminations, embedding sheets with both organic and found/industrial patterns, and, mixing and using over-beaten pulp slurry as a drawing/painting medium on top of wet handmade papers. Using the beautiful seafront location of our studio classroom, we will make a seaweed paste to create the lines for pulp drawings. Students will have a unique opportunity to work on one large scale handmade paper panel (approximately 5 ft x 5 ft) as well as produce a wide array of mid to small paper sheets. Botanical Papermaking is a full 3 credit course with an intense pace of learning, discovery, exploration, production. Handouts, slide lectures, films, and lectures on both the history of papermaking and contemporary practice for studio artists and designers. Experienced or beginning students are welcomed.

Prerequisite(s): none Corequisite(s): none

#### ARTS 150 Metal Arts I

3 cr.

This course is designed to provide a safe outlet for artistic expression using metal as the medium. Basic sheet metalworking, hand tools, bending equipment, cutting equipment and welding power source usage will be studied. Students will utilize the studied art forms to design and build individualized works using primarily mild steel as the medium, and will develop their artistic expression and aesthetic awareness while learning the safe use of metalworking through creative projects.

Prerequisite(s): MATH-020 Corequisite(s): none

#### ARTS 160 Printmaking I

3 cr.

This course will introduce students to a wide variety of approaches to fine art printmaking. Students will explore monoprinting techniques, block printing (including linoleum blocks and woodcuts), collograph and drypoint. Some non-toxic approaches to etching on copper plates may also be included in the class. Students will learn to print by hand and also become

skilled in the use of the printing press. Projects will focus on the exploration of visual themes through a series of prints and by creating editions. Visits to local print workshops and exhibitions will enrich the students' studio experience.

Prerequisite(s): none Corequisite(s): none

# ARTS 170 Photography I

3 cr.

This class will introduce and explore the technical, historical, and contemporary concerns of photography as a form of artistic expression. Much of the work will be done in the digital environment, but projects will include other forms of making photographs. Students will gain a working knowledge of Adobe Photoshop as it relates to more traditional modes of image making. The central goal of the class is for students to learn and expand the vocabulary and grammar of the medium and find their own way of using it creatively to express original visual ideas and unique perspectives. Discussions will focus on gaining an understanding of the contemporary and historical contexts from which we work. Class time will be devoted to lectures, demonstrations, critiques, slide talks, and visits to galleries and museums. Students should have their own camera or access to a camera for the duration of the course.

Prerequisite(s): none Corequisite(s): none

#### ARTS 179 Alternative Photographic Processes 3 cr.

Focusing on historical and alternative (pre-digital) forms of photography, this class will explore the historic arc of picture making from the birth of the medium to digital intervention. Students will be exposed to the plastic camera, the pinhole camera, black and white film processing, and historic printing processes like the Cyanotype, Gum Bichromate and the Kallitype. Emphasis will be placed on using these historic photographic tools to create emergent physical forms of photographic and student expression. Students will be encouraged to combine and move between individual photographic processes and presentation, and to work together as individuals and collectives. There are no prerequisites for this class, however students must be willing to actively build and create.

Prerequisite(s): none Corequisite(s): none

#### ARTS 180 Painting I

3 cr.

This introduction to painting is designed for both beginners and more experienced painters. Using water-based oils and acrylic paints, the class will lead students through the basics of color theory, color mixing and paint application on a variety of surfaces. There will be a focus on creative approaches to observational work, using studio set-ups and the rich natural environment around SMCC. Class trips to Portland will introduce students to the resources of galleries and museums as well as the private studios of practicing artists.

Prerequisite(s): none Corequisite(s): none

#### ARTS 189 Watercolor

3 cr.

The objective of this class is to use watercolors to paint from nature, gaining mastery of the technique and exploring the environment. Costal Maine has been an influential landscape for artists throughout the past century: John Marin, Marsden Hartley, Rockwell Kent, Fairfield Porter, and many others found it an inspiring place to investigate modern painting, and watercolor was the medium that allowed them the freedom to explore. Southern Maine Community

College's costal location will allow us to follow this tradition as we learn how to use watercolor outdoors to paint from observation. Students will learn skills needed to paint in watercolor, such as paper preparation, lifting color, and optical color mixing, and the emphasis will be on engagement with the surrounding environment and a willingness to experiment. Work will take place in the Art Studio and outdoors around the SMCC campus. A field trip to Peaks Island will allow for further exploration, and a second field trip to the Portland Museum of Art and local galleries will provide students with examples of other artists' reactions to the Maine environment.

Prerequisite(s): none Corequisite(s): none

#### ARTS 190 Illustration

3 cr.

This course is an exploration of the relationship between pictures and words, balancing an emphasis on concept and individual expression with the development of skills in a variety of wet and dry art media. Students will complete projects that address the many different usages of illustration: editorial, book, advertising, product and sequential art. Demonstrations, discussions and critiques on the creative process, professional development and individual style will be led by the instructor, guest artists and students.

Prerequisite(s): none Corequisite(s): none

#### ARTS 210 Drawing II

2 cr

This class explores in greater depth the concepts and techniques covered in introductory drawing courses. Students will further develop their observational drawing skills and will work towards developing personal means of expression through expressionistic and conceptual drawing exercises. A significant amount of time is devoted to working from live models. A broad range of drawing materials including mixed-media will be utilized. Time will be spent preparing a well organized and presented portfolio.

Prerequisite(s): ARTS-110 Corequisite(s): none

## ARTS 220 Photography II

3 cr.

Photography II builds on the techniques and content delivered in Photo I. Students will gain a deeper understanding of the mediums ability to describe and their own forms of personal expression through individually developed projects, and an expanded understanding of the varying photographic tools including; plastic cameras, pinhole cameras, 35 mm cameras, digital cameras, medium format cameras, large format 4x5 cameras, color negatives, black and white negatives, scanning, and Inkjet printing. Students will produce a variety completed projects in multiple forms including, published books, web based portfolios, and Inkjet prints. Class time will explore the class material through lectures, demonstrations, critiques, lab time, visits to galleries, museums, artist studio's and places of photographic interest. Students should have their own camera or access to a camera for the duration of the course.

Prerequisite(s): ARTS-170 Corequisite(s): none

# ARTS 230 Painting II

3 cr.

This course builds on the skills and techniques explored in Painting I, with a stronger focus on creative approaches to figurative painting and individual expression. Using water-based oils and acrylic paints, the class will lead students to explore advanced color theory, color mixing and paint application on a variety of surfaces. Class trips to Portland will introduce students to the resources of galleries and museums as well as the private studios of practicing artists. Out of class work will be expected.

Prerequisite(s): ARTS-180 Corequisite(s): none

#### ARTS 240 3D Design II: Sculpture Studio 3 cr.

This course will continue the visual and conceptual investigations introduced in 3D I: Sculpture Studio, with a focus on expanding and redefining a student's ideas and experiences of art making. Students will work on idea generation and development which will move from varying states in the design process: of definition the visual problem, search (brainstorming, multiple sketching, association),

selection of materials and techniques, execution (production and fabrication), and evaluation. Students will use a range of materials including clay, plaster, wire, cement, earth, paper, mixed media, found object and wood. Fabrication methods may include mold making, casting, fiber techniques of coiling and wrapping, carving, and additive work.

Prerequisite(s): ARTS-140 Corequisite(s): none

## ARTS 250 Metal Arts II

3 cr.

This course will explore visual and conceptual aspects of sculpture through the use of steel. A series of structured and independent assignments, material demonstrations, lecture, and critique will enable students to investigate the potential for this media to offer a wide range of prospects in terms of context (object, installation, and environment) to support the content of their work. Students are expected to integrate this knowledge with their subjective concerns in order to further the depth and understanding of their studio practice. The content and physical nature of the work will be self directed; however, there will be a series of technical assignments that build on the knowledge gained through ARTS 155.

Prerequisite(s): ARTS-150 Corequisite(s): none

# ARTS 260 Printmaking II

3 cr.

This course will expand on topics introduced in Printmaking I. In addition to basic techniques such as collograph, monotype and the relief print, students will investigate woodblock printing and etching on copper plates. The focus will be on creating larger work and extended series of prints as well as printing on non-traditional surfaces. Students will refine their presentation skills through exhibitions of their prints. Out of class work will be expected.

Prerequisite(s): ARTS-160 Corequisite(s): none

## ARTS 290 Advanced Studio Projects

3 cr.

In this course students embark on an individualized studio exploration in an artistic medium of their choice. After the initial creation of a project plan that outlines goals and methods of evaluation for the semester, students work closely with the instructor to create an advanced body of artwork, culminating in a final faculty critique and written self-evaluation.

Prerequisite(s): Department Chair Permission Corequisite(s): none

# Automotive Courses (AUTO)

AUTO 105 Auto Maintenance & Light Repair 3 cr.

This introductory prerequisite course will introduce students to workplace safety in the automotive shop. Safety topics will include shop hazards such as fire, airborne gases, blood borne pathogens, and chemical hazards. Equipment instruction will include the safe operation of an automotive lift and an introduction to oxygen-acetylene torches, among other shop equipment. Students will be introduced to the basics of identifying failures on the automobile and how to perform basic maintenance. Students will research vehicle information utilizing electronic technical information to determine the correct service procedures and specifications.

Prerequisite(s): Automotive program acceptance Corequisite(s): none

## AUTO 110 Steering and Suspension 3 cr.

This course is the study of the steering and suspension systems of modern vehicles, with practical experience in analyzing problems and replacement of worn parts. Included will be the study of front and rear wheel alignment and wheel balance. Students will inspect and diagnose steering and suspension systems to determine necessary actions. Students will apply critical judgment to determine effective diagnostic procedures based on available vehicle data and service information.

Prerequisite(s): Automotive program acceptance Corequisite(s): AUTO-105

# AUTO 115 Automotive Brake Systems 4 cr.

This course teaches the theory, diagnosis, and repair of hydraulic, mechanical, vacuum, and electronic systems of automobile brakes Students will check hydraulic components for internal and external leaks and determine necessary action; measure and adjust brake pedal height and parking brake linkage; and conduct drum brake and disc brake diagnosis and repair. Students will also inspect and test power booster and anti-lock brake system (ABS) components and determine necessary action.

Prerequisite(s): AUTO-105 Corequisite(s): none

#### AUTO 125 Maine State Inspection Exam Prep 1 cr.

This elective course is a study of the Maine motor vehicle safety inspection standards and the law. This course will prepare students to sit for the exam with the Maine State Police and become a licensed Maine Motor Vehicle Safety Inspection technician, Class A and E. This course will focus on the responsibilities of the inspection technician, correctly performing a

safety inspection, as well as interpretation and presentation of the law from the Maine State Inspection Manual. Students must pay the applicable fee and complete an application to the Maine State Police at the beginning of the semester to be eligible to sit for the exam at the end of the course and receive the manual utilized in the course. See automotive faculty for a current application.

Prerequisite(s): Automotive program acceptance Corequisite(s): none

# AUTO 155 Electricity and Electronics 4 cr.

This course will introduce the fundamentals of electrical/electronics theory. Students will learn the fundamentals of electricity including the study of voltage, amperage, resistance, wattage and Ohm's Law. Students will understand the fundamentals of an electrical circuit, common failures and diagnostic procedures, as well as how to determine the appropriate corrective actions while utilizing a digital volt Ohm meter. Additionally, students will learn the basics of starting and charging systems as well as how to utilize a wiring diagram.

Prerequisite(s): AUTO-105 or HEOP-100

Corequisite(s): none

# AUTO 160 Automotive Business Operations 3 cr.

This course introduces students to basic business operations, such as business plan writing and finance, managing materials and supplies, OSHA regulations, human resources, payroll, cash flow, and risk management issues. Case studies and simulation activities may be included.

Prerequisite(s): Automotive program acceptance

Corequisite(s): none

#### AUTO 170 Automotive HVAC

This course is an examination of automotive heating, ventilation, and air conditioning systems, with a focus on identification of malfunctioning parts and the repair of these systems. Students will diagnose the heating and air conditioning system and determine necessary action for unusual operating noises and inoperative conditions. Students will diagnose temperature control problems and failures in the electrical controls of heating, ventilation, and air conditioning systems and determine necessary action.

3 cr.

Prerequisite(s): none

Corequisite(s): AUTO-105, AUTO-155

# AUTO 173 Cooperative Externship I 3

Cooperative Education Externship I is unpaid on-thejob training, providing the student with a work experience in the areas of preventative maintenance; steering and suspension; brakes; heating, ventilation and air conditioning; or related field of specific interest to the student. Students will function as part of a team in an automotive repair facility and will assist in the inspection, diagnosis, and repair of faulty parts. The student is primarily responsible to the employer for the various work responsibilities established, and is also responsible to the course instructor to complete the internship requirements.

Prerequisite(s): AUTO-110, AUTO-115, AUTO-155,

AUTO-170

Corequisite(s): MATH-125

#### AUTO 174 Advanced Level Lab I

3 cr.

The advanced level lab provides the student with an alternative track to the internship. The lab will allow students to develop additional skills or fine tune skills centered toward the NATEF standards in preventive maintenance, steering and suspension, brakes, including anti-lock brakes and heating ventilation and air conditioning. Students may elect this course in lieu of AUTO-175, Cooperative Education I.

Prerequisite(s): none

Corequisite(s): AUTO-110, AUTO-115, AUTO-155,

AUTO-170

# AUTO 175 Cooperative Education I

3 cr.

Cooperative Education Placement is on-the-job training, providing the student with a work experience in the areas of preventative maintenance; steering and suspension; brakes; heating, ventilation and air conditioning; or related field of specific interest to the student. Students will function as part of a team in an automotive repair facility and will assist in the inspection, diagnosis, and repair of faulty parts. The student is primarily responsible to the employer for the various work responsibilities established, and is also responsible to the course instructor to complete the internship requirements.

Prerequisite(s): AUTO-110, AUTO-115, AUTO-155,

AUTO-170

Corequisite(s): MATH-125

## AUTO 205 Electricity and Electronics II 4 cr.

The second of two courses, this course examines the electrical and electronic systems of automobiles. Students will study inputs, outputs and processors of electronic systems. Students will diagnose starting, charging and ignition systems, and remove and install starters and generators. Students will also diagnose incorrect operation of chassis and body electrical and electronic systems and determine necessary actions.

Prerequisite(s): AUTO-105, AUTO-155

Corequisite(s): none

# AUTO 210 Intro Engine Repair & Performance 4 cr.

The first of a two-course sequence addressing automotive engines and engine performance, this course will introduce the theory, operation and repair of the four stroke cycle gasoline engine found in today's automobiles. Students will learn basic ignition system principles and their applications on modern engines. Students automotive will compression tests, cylinder leakage tests and vacuum tests to identify failed areas of the engine and required service procedures. Students will disassemble engines and identify internal components and their function within the engine. Students will learn to make measurements of bearing journals, cylinder bores, pistons, camshafts and other internal components necessary to determine failures and the appropriate repair and service procedures.

Prerequisite(s): none Corequisite(s): AUTO-205

#### AUTO 215 Manual Transmissions & Drivelines 4 cr.

This course will cover manual drive train and axles theory, diagnosis and repair. Students will learn to remove and reinstall transmission/transaxles. Students will inspect and repair manual transmission systems, inspect and reinstall power train, and perform clutch diagnosis and repair. Students will apply critical thinking skills, utilizing service information, to diagnose problems with transaxles, clutches, and drive shafts and determine necessary corrective action.

Prerequisite(s): AUTO-105 Corequisite(s): none

# AUTO 223 Cooperative Externship II 3 cr.

Cooperative Education Extension II is unpaid on-thejob training, providing the student with a work experience in the areas of electrical/electronics; manual transmissions and drivelines; or related field of specific interest to the student. Students will function as part of a team in an automotive repair facility and will assist in the inspection, diagnosis, and repair of faulty parts. The student is primarily responsible to the employer for the various work responsibilities established, and is also responsible to the course instructor to complete internship requirements.

Prerequisite(s): AUTO-173 or AUTO-174 or AUTO-175

Corequisite(s): AUTO-205, AUTO-215

#### AUTO 224 Advanced Level Lab II 3 cr.

The advanced level lab will provide the student with an alternative track to the internship. The lab will allow students to develop additional skills or fine tune skills centered toward the NATEF standards in electrical/electronics, manual transmissions and

driveline standards. Students may elect this course in lieu of AUTO-225 Cooperative Education II.

Prerequisite(s): AUTO-173 or AUTO-174 or AUTO-175 Corequisite(s): AUTO-205, AUTO-215

AUTO 225 Cooperative Education II 3 cr.

Cooperative Education Placement is on-the-job training, providing the student with a work experience in the areas of electrical/electronics; manual transmissions and drivelines; or related field of specific interest to the student. Students will function as part of a team in an automotive repair facility and will assist in the inspection, diagnosis, and repair of faulty parts. The student is primarily responsible to the employer for the various work responsibilities established, and is also responsible to the course instructor to complete internship requirements.

Prerequisite(s): AUTO-173 or AUTO-174 or AUTO-175 Corequisite(s): AUTO-205, AUTO-215

#### AUTO 255 Advanced Automotive Diagnostics 4 cr.

The second of two courses, this course is a comprehensive overview of automotive electronic fuel injection systems and vehicle emission systems. Students will learn to utilize proper diagnostic procedures and determine appropriate corrective procedures to repair, replace or install components that cause poor engine performance. Students will be introduced to emission controls, their purpose on OBDII engines and their effect on engine performance when they are not operating properly.

Prerequisite(s): AUTO-210 Corequisite(s): none

#### AUTO 265 Auto Transmissions & Transaxle 4 cr.

This course will cover automatic transmission theory, diagnosis, and repair Students will perform full invehicle and off-vehicle transmission inspection and apply critical thinking skills, utilizing service information, to diagnose problems and determine necessary corrective action. Students will disassemble an automatic transaxle, inspect for failed parts and rebuild transaxle to operating condition.

Prerequisite(s): AUTO-205, AUTO-215

Corequisite(s): none

#### AUTO 273 Cooperative Externship III 3 cr.

Cooperative Education Extension III is unpaid on-thejob training, providing the student with additional work experience in the areas of: engine repair; engine performance; automatic transmissions and transaxles; or related field of specific interest to the student. Students will function as part of a team in an automotive repair facility and will assist in the inspection, diagnosis, and repair of faulty parts. The student is primarily responsible to the employer for the various work responsibilities established, and is also responsible to the course instructor to complete internship requirements.

Prerequisite(s): AUTO-223 or AUTO-224 or AUTO-225

Corequisite(s): AUTO-255, AUTO-265

# AUTO 274 Advanced Level Lab III 3 cr.

The advanced level lab will provide the student with an alternative track to the internship. The lab will allow students to develop additional skills or fine tune skills centered toward the NATEF standards in electrical, automatic transmissions and transaxles, engine repair and engine performance fundamentals. This lab may be elected as an alternative to the AUTO-275 requirement, Cooperative Education III.

Prerequisite(s): AUTO-223 or AUTO-224 or AUTO-225 Corequisite(s): AUTO-255, AUTO-265

AUTO 275 Cooperative Education III 3 cr.

Cooperative Education Placement is on-the-job training, providing the student with additional work experience in the areas of: engine repair; engine performance; automatic transmissions and transaxles; or related field of specific interest to the student. Students will function as part of a team in an automotive repair facility and will assist in the inspection, diagnosis, and repair of faulty parts. The student is primarily responsible to the employer for the various work responsibilities established, and is also responsible to the course instructor to complete internship requirements.

Prerequisite(s): AUTO-223 or AUTO-224 or AUTO-225 Corequisite(s): AUTO-255, AUTO-265

Behavioral Health and Human Service Courses (BHHS)

#### BHHS 100 Intro to Human Services 3 cr.

This course offers a broad overview of the human service field. Topics of study include the history of human services, theoretical approaches to human service work, human service systems, ethics, and future trends. The course provides a well-rounded look at the many career options available in human services and discusses the challenges that human-service workers face in day-to-day work.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

# BHHS 102 Personal Growth and Development 3 cr.

A comprehensive course that integrates personal growth and self-understanding with personal and professional choices. The course will cover self-

advocacy and positive communication skills; assessing assumptions, biases, and what we take personally; evaluating our individual and societal values and ethical standards; considering our personal family history and its impact on us; and appraising our cross cultural competence. Emphasis on self-knowledge, its value and affect on our lives.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

# BHHS 105 Crisis Intervention

This course provides an introduction to observing and analyzing behavioral symptoms in persons with behavioral health disabilities Emphasis is placed on recognizing common behavioral elements and in utilizing interventions appropriate specific situations. Diagnostics. behavioral management approaches, crisis intervention methods, and links between analysis and intervention will be presented. The course is taught in three modules: a) observation, assessment; b) management analysis, modification of behavior; c) crisis management, intervention and safety. Note: This course meets the MHRT/Community Requirement - Crisis Identification and Resolution.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

# BHHS 110 Psychosocial Rehabilitation

This course will examine a coherent model of psychosocial rehabilitation (PSR) as a core organizing principle of all behavioral health care The core philosophy and values of PSR and their application in essential client services is examined. The experience of disability and recovery are emphasized. The key processes of PSR are explored conceptually and experientially. The application of PSR within the behavioral health care system is examined. Note: This course meets the MHRT/Community Requirement - Psychosocial Rehabilitation.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## BHHS 150 Special & Diverse Populations 3 cr.

This course will address behavioral symptoms in various special populations and the care, treatment, and rehabilitation approaches relevant to each Beyond a general introduction to various groups served, students will become familiar with several populations with special care and rehabilitation needs. The course will also focus on the unique care environments created to respond to the behavioral health needs of these various groups. Note: This course meets the MHRT/Community requirement - Cultural and Diversity Awareness.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### BHHS 170 Behavioral Health/Early Childhood 3 cr.

This course (offered jointly with the Early Childhood Education Department) is intended to provide childcare providers and other early childhood professionals with an introduction to the principles and practices of behavioral health for young children Course content is presented in three modules. Module One: Perspectives on the Behavioral Health of Young Children. Module Two: Promoting Healthy Emotional and Social Development. Module Three: Children with Challenging Behaviors - Assessment and Intervention.

Prerequisite(s): BHHS-100 Corequisite(s): none

3 cr.

3 cr.

# BHHS 175 Behavioral Health and Aging 3 cr.

This course provides an overview of the physical and psychosocial aspects of the typical and atypical aging process Special populations, various systems of care, the role of the public sector, and the role of advocacy are also covered. Note: This course meets the MHRT/Community Requirement - Mental Health and Aging.

Prerequisite(s): BHHS-100 Corequisite(s): none

# BHHS 215 Death and Dying

3 cr.

This course will focus on the questions rooted at the center of the human experience and also increase the students' knowledge of death and dying in the positive framework of viewing death as a celebration of life Readings and course content will combine many diverse points of view from the sociological, emotional, individual, experiential and scholarly to provide a balanced perspective on said topic. The course will include, but is not limited to, the following topics: trends and patterns in death and dying, including historical perspectives, death in popular culture, medical technology and dying, the dying patient's perspective, and ethical dilemmas.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### BHHS 220 Interviewing and Counseling 3 cr.

This course introduces students to the fundamentals of interviewing and counseling through a combination of reading, experiential exercises, presentations, and lecture Students will learn basic counseling skills, while obtaining a conceptual framework for understanding the process of counseling. The emphasis is on building basic skills (i.e., fundamentals of interviewing, communication and relationship building) while exploring helping theory and its application to special populations. Note: This course meets the

Prerequisite(s): BHHS-100 Corequisite(s): none

#### BHHS 225 Direct Service Practicum I 3 cr.

This practicum course is required for all students matriculated in the associates degree program It is designed to give students a structured experience in the field of human services through field work in a local organization. As part of the practicum experience, students will examine their own interests and preferences, learn how to use supervision effectively, and familiarize themselves with their host organization.

Prerequisite(s): BHHS-100, BHHS-105, BHHS-150 Corequisite(s): none

#### BHHS 230 Substance Abuse

3 cr.

This course provides students with an introduction to the delivery of substance abuse services to various populations It reviews the physical, psychological, and social impact of substance abuse as well as the strategies used to care for various populations. Note: This course meets the MHRT/Community Requirement - Substance Abuse.

Prerequisite(s): BHHS-100 Corequisite(s): none

## BHHS 250 Addictions Counseling 3 cr

This course provides students with an overview of the knowledge, skills, and attitudes of professional practice in addictions counseling Students will integrate theory with practice and develop specific skills necessary to become an effective addiction counselor.

Prerequisite(s): BHHS-230 Corequisite(s): ENGL-100

# BHHS 255 Co-Occurring Disorders 3 c

This course provides students with an introduction to the delivery of co-occurring mental health and substance abuse services to various populations. It reviews relevant models, organizational structures and practice implications for providing effective co-occurring services. The course is designed to heighten students' awareness of the impact that co-occurring disorders have on individuals' lives and on the systems and approaches designed to provide needed services.

Prerequisite(s): BHHS-230, ENGL-100

Corequisite(s): none

#### BHHS 260 Group Process

3 cr.

This course introduces students to the basics concepts of group dynamics and group work in the human service field Students will study such topics as leadership, group dynamics, group theory, ethics, diversity in groups, and group development. Note: This course meets one the MHRT Community Requirement - Group process.

Prerequisite(s): BHHS-100 Corequisite(s): none

## BHHS 265 Trauma, Sexual Abuse, & Recovery 3 cr.

This course introduces students to the fundamentals of child sexual abuse and Traumatic Stress Disorders: Post Traumatic Stress Disorder (PTSD) and Acute Stress Disorder (ASD) through a combination of reading, experiential/small group exercises, presentations, and lecture Students will learn basic concepts of a trauma theory, Constructivist Self Development Theory (CSDT), the signs and symptoms of PTSD/ASD, and how traumatic events affect an individual?s thoughts and behaviors. The emphasis is on developing basic knowledge (i.e., fundamentals of how trauma affects an individual, signs and symptoms of trauma reactions, appropriate level treatment options and self-care techniques for the client and worker). Application to special populations will be explored. Note: This course meets the MHRT/Community Requirement - Trauma, Sexual Abuse, and Recovery.

Prerequisite(s): BHHS-100 Corequisite(s): none

# BHHS 270 Case Management

3 cr.

This course introduces students to the fundamentals of case management practice Students will review different models of case management and learn about common case management functions such outreach, engagement, assessment, planning, accessing resources, coordination, and disengagement. Note: This course meets the MHRT/Community Requirement - Case Management.

Prerequisite(s): BHHS-100 Corequisite(s): none

# BHHS 275 Direct Service Practicum II 3 cr.

This practicum course is required for all students matriculated in the associate degree program It is designed to build upon a student?s earlier field experiences through more advanced work in a local human service organization.

Prerequisite(s): none Corequisite(s): BHHS-225

# Biology Courses (BIOL)

# BIOL 100 General Biology & Lab

4 cr.

This lab science course provides a survey of the domains and kingdoms of bacteria, archaea, protists, plants, animals and fungi and the basic principles and unifying concepts of biology for non-majors. Major topics are basic chemistry, cell biology, metabolism, and genetics, with evolution as the unifying theme. The laboratory component emphasizes the application of scientific methodology to the study of the natural world with hands-on and interactive activities. Students consider how biology impacts their personal life and community.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): MATH-050

# BIOL 110 Introduction to Biotechnology 4 cr.

This is an introductory science class designed to introduce biology majors and non-majors to the field of biotechnology. Biotechnology is a discipline generally based on recent advances in the field of recombinant DNA technology. It may be defined as any technology that uses living organisms or parts of organisms to make or modify products. This definition opens up the field to many thousands of years of human experimentation from wine and cheese making, to animal and plant breeding programs. The course will emphasize the applications of the various including molecular technologies genetics. microbiology, immunology, and cell biology in human society. Laboratory work, outside speakers, and field trips will be used to supplement lecture presentations. Examples of Biotech projects and companies in the State of Maine will be emphasized.

Prerequisite(s): MATH-020 Corequisite(s): none

corequiore(o). Horic

# BIOL 115 Botany

4 cr.

This is an introductory course designed to introduce students to the structures and functions of plants and the science of plant systems. Course content provides lecture and laboratory topics in plant anatomy, morphology, and physiology, as well as the history of plant science. The objective of the course is to provide students with the fundamentals of plant biology, ecology, and taxonomy that will foster greater confidence and success identifying, growing and maintaining plants.

Prerequisite(s): none Corequisite(s): none

#### BIOL 120 Biology I

3 cr.

This is the first semester lecture of a two-semester Biology sequence intended for biology/science majors or students looking to transfer laboratory science credits. Biology I lecture concentrates on the molecular aspects of biology, cell structure and function, homeostasis, energy transformations, and genetics.

Prerequisite(s): ENGL-050, ENGL-075, MATH-050

Corequisite(s): BIOL-121

# BIOL 121 Biology I Lab

1 cr.

This is the first semester laboratory of a two-semester Biology sequence intended for biology/science majors or students looking to transfer laboratory science credits This laboratory component is intended to provide students with experiential learning in support of concepts and principles introduced in the lecture class.

Prerequisite(s): ENGL-050, ENGL-075, MATH-050

Corequisite(s): BIOL-120

## BIOL 125 Biology II

3 cr.

This is the second semester lecture of a two-semester Biology sequence intended for biology/science majors or students looking to transfer laboratory science credits Biology II lecture concentrates on living organisms at structural levels above the molecular and cellular levels addressed in Biology I. Specific topics include taxonomy and the principles of biological diversity, evolution, and ecology.

Prerequisite(s): BIOL-120 Corequisite(s): BIOL-126

# BIOL 126 Biology II Lab

1 cr.

This is the second semester laboratory of a twosemester Biology sequence intended for biology/science majors or students looking to transfer laboratory science credits This laboratory component is intended to provide students with experiential learning in support of concepts and principles introduced in the lecture class.

Prerequisite(s): BIOL-121 Corequisite(s): BIOL-125

# BIOL 130 Anatomy & Physiology I

3 cr.

This course is designed for first-year students preparing for a career in the medical field. Fundamental concepts will be introduced, and the course will focus on the tissues, integument, skeleton, joints, muscle, and nervous system of the human body. It is strongly recommended that students taking this course have recently finished a biology course.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020

Corequisite(s): none

#### BIOL 131 Anatomy & Physiology I Lab

This laboratory course uses models, prepared microscope slides and preserved specimens to complement the lecture in Anatomy & Physiology (BIOL-130). The focus will be on human tissues, integument, skeleton, joints, muscles and nervous system.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020

Corequisite(s): none

# BIOL 135 Anatomy & Physiology II 3 cr.

This course is a continuation of BIO-130, building on many of the fundamentals. Emphasis will be on the nervous, endocrine, cardiovascular, lymphatic, digestive, respiratory, urinary, and reproductive systems of the human body.

Prerequisite(s): BIOL-130, BIOL-131

Corequisite(s): none

# BIOL 136 Anatomy and Physiology II Lab 1 cr.

Laboratory work in this course is devoted to studying the many systems discussed in Anatomy & Physiology II (BIOL-135): nervous II, endocrine, cardiovascular, lymphatic, digestive, respiratory, urinary, and reproductive.

Prerequisite(s): BIOL-130, BIOL-131

Corequisite(s): none

# BIOL 190 Natural History of Casco Bay 4 cr.

This course brings together the various disciplines of biology, botany, zoology, ecology, geology, hydrology, and oceanography to study the biodiversity of the Casco Bay area Students will gain field and laboratory experience as naturalists in the identification, taxonomy and natural history of selected plants, animals, fungi and ecosystems common in this bioregion. Ecological relationships are explored, and concepts such as evolution are examined. The importance of appreciating and conserving our local biodiversity is emphasized.

Prerequisite(s): MATH-020 Corequisite(s): none

#### BIOL 209 Genetics Short Course

This is a hands-on laboratory course in molecular biology, focusing experimental procedures including RNA and DNA extraction, Polymerase Chain Reaction and DNA sequencing. The curriculum will mix intensive, hands-on laboratory work with several informal seminars. This course is funded by the INBRE (IDeA Networks of Biomedical Research Excellence) grant that SMCC has received from the NIH (National Institute of Health) to promote the Biomedical Research capacity for the State of Maine.

Prerequisite(s): Instructor approval

Corequisite(s): none

1 cr.

#### BIOL 210 Genetics

3 cr.

The two major branches of genetics, molecular and classical genetics, are studied in detail. The first half of this course focuses on studying structure and function of genes at the molecular level, including discussions on recombinant DNA and DNA analysis techniques. Classical, or Mendelian, genetics encompasses the second half of the course and centers on transmission of traits from one generation to the next. Other topics include transposable elements, bacterial and viral genetics. Lectures include active learning exercises where student groups work on a diversity of genetic problems.

Prerequisite(s): BIOL-120, BIOL-121

Corequisite(s): BIOL-211

#### BIOL 211 Genetics Lab

1 cr.

This lab course provides students with hands-on activities in both molecular and classical branches of genetics. Selected topics from BIO-201 will be studied by means of group and individual projects. Topics include: molecular genetics, recombinant DNA, DNA analysis techniques, Mendelian genetics, trait transmission, transposable elements, and bacterial and viral genetics.

Prerequisite(s): none Corequisite(s): BIOL-210

# BIOL 235 Pathophysiology

3 cr.

This course is designed to provide the student with an introduction to the study of disease, both congenital and acquired. Emphasis is placed on the alteration of normal physiology in the presence of disease processes to include signs and systems as well as physical consequences and laboratory findings.

Prerequisite(s): BIOL-135, BIOL-136

Corequisite(s): none

## BIOL 250 Microbiology

5 cr.

This course studies the principles and techniques utilized in microbiology. Consideration will be given to microbial structure, growth, physiology and the reaction of microorganisms to their physical, chemical and biological environment. Laboratory emphasis will be placed on development of proper laboratory techniques and the identification of microorganisms.

Prerequisite(s): BIOL-100 or BIOL 124/125 or BIOL

130/131

Corequisite(s): none

3 cr.

Students will develop an understanding of how eukaryotic cells function, along with an appreciation of the experimental approaches that are behind this knowledge. The course will focus on cell architecture, the structure and function of proteins, genetics and molecular biology, biomembranes, transport across cell membranes, the integration of cells into tissues, control of transcription, and signaling pathways. Critical reading and discussion of journal articles is introduced in the course. Methods in molecular and cellular biology are also introduced.

Prerequisite(s): BIOL-100, BIOL-120 Corequisite(s): none

corequisite(s). Horic

# BIOL 275 Biotechnology Internship 2 cr.

This course is an opportunity for students to work in a professional laboratory setting. This work-based learning will enhance students' abilities well beyond the scope or capabilities of the academic program at SMCC and will provide students with valuable real life experience and the opportunity to refine career objectives. The student is primarily responsible to the employer for the various work responsibilities established and is also responsible to the course instructor to complete specific academic requirements. This course may be repeated for credit.

Prerequisite(s): BIOL-125, BIOL-126, BIOL250

Corequisite(s): none

# Marine Biology Courses (BIOM)

#### BIOM 110 Marine Biology

3 cr.

1 cr.

This course is designed for students needing an introductory college level science class. In order that the student have a good understanding of the environment that the biology inhabits, the course begins with a brief overview of basic physical, chemical and geologic oceanography. A discussion of major phyla in each of the kingdoms that live in the sea will include taxonomy, evolution, ecology, as well as, where appropriate, concerns relating to future survival/extinction of groups under consideration. Laboratory exercises are designed to give a "hands-on" opportunity to further enhance students' appreciation of the incredible diversity of sea life.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020

Corequisite(s): BIOM-111

#### BIOM 111 Marine Biology Lab

Laboratory exercises are designed to give a "hands-on" opportunity to further enhance students' appreciation of the incredible diversity of life in the sea.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020

Corequisite(s): BIOM-110

# BIOM 170 Invertebrate Zoology

5 cr.

This course will familiarize students with invertebrate life of the sea. Emphasis will be placed on natural history, taxonomy, identification, anatomy and ecological relationships. Wherever possible, local specimens will be used in the laboratory.

Prerequisite(s): BIOL-100 or BIOL-125 and BIOL-126

Corequisite(s): none

# BIOM 180 Marine Botany

4 cr.

This course is designed to introduce students to major groups of marine algae that are found along the North Atlantic shore. Emphasis will be placed on the methods of study, taxonomy, morphology, zonation, and physiology of principal groups of algae.

Prerequisite(s): BIOL-100 or BIOL-125 and BIOL-126

Corequisite(s): none

# BIOM 255 Ecology

4 cr.

This course covers the basic principles of general ecology: the physical environment, populations, communities, ecosystems, and global issues. Fundamentals of the scientific method, the impact of limiting factors, biogeochemical cycles, and the significance of human activity will also be stressed. Sampling techniques are described and practiced during the laboratory.

Prerequisite(s): BIOL-100 or BIOL-125 and BIOL-126

Corequisite(s): none

# BIOM 265 Fishery Science

4 cr.

This course covers the taxonomy and life history of important families of fishes, aspects of anatomy and physiology that are unique to the fishes, fish culture and topics in fisheries management. There is a strong field component to this course. Field trips will include beach seining and fisheries surveys aboard a vessel in Casco Bay.

Prerequisite(s): BIOL-100 Corequisite(s): none

#### BIOM 290 Biological Research Practicum 4 cr.

This course is designed to be a capstone course for students in Applied Marine Biology & Oceanography and Liberal Studies with a Biological Concentration. The course teaches students how to carry out a scientific investigation. Topics include writing a proposal, researching the scientific literature, designing and conducting an experiment, analyzing data and reporting the result. Projects are conducted at SMCC's Aquaculture lab and often investigate reproductive cycles of aquatic organisms. This course has been designated as a writing-intensive course.

Prerequisite(s): BIOL-100, ENGL-100

Corequisite(s): none

# Business Courses (BUSN)

#### BUSN 100 Introduction to Business 3 cr.

A rigorous examination of the key decisions that business organizations face, with particular emphasis on the role that technology and society play when making those decisions. Students examine numerous situations involving products, processes, ethics, teamwork, and markets to familiarize themselves with the choices that face business owners and their employees. A short entrepreneurial, product-design project and longer negotiation module are included.

Prerequisite(s): MATH-020 Corequisite(s): none

#### **BUSN 115** Personal Finance

This course helps students to overcome difficulties with managing personal finances Foremost emphasis is placed on methods of measuring and evaluating expenditures with a budget so that the individual will maximize the use of their earnings. Included is an evaluation of occupations and income potential; investments and mutual funds, use of credit and the borrowing of money, taxes and estate planning,

purchase of major assets, including home, vehicle and

appliances, and also various types of insurance.

Prerequisite(s): MATH-020 Corequisite(s): none

#### BUSN 130 Entrepreneurship

This course will explore the foundations and principles of entrepreneurship and the relationship to small business. The basic concepts of business and the application in operating a new or existing business will be discussed. Benefits, challenges and key elements of entrepreneurship, ownership options, planning, marketing, financial plans and management will be explored. Course homework and projects will focus on strategic planning, market plan development and the rudiments of the overall business plan. A business plan will be developed in theoretical exercises and practical plans for students intending to enter a defined business venture.

Prerequisite(s): MATH-020 Corequisite(s): none

# BUSN 150 The Selling Process

This course is designed to merge into a logical framework the activities used when marketing a product or service with the personnel selling process Students learn basic marketing management skills and then use those to design sales plans, manage

territories, uncover customer needs, prepare proposals, make presentations, implement a closing process, and gather marketing intelligence. Direct marketing, telemarketing, and Internet marketing techniques are included.

Prerequisite(s): none Corequisite(s): none

3 cr.

3 cr.

3 cr.

# BUSN 230 Entrepreneurship II

3 cr.

This course is for students who may want to start, manage or grow a business. Beginning with the identification of the business opportunity, students establish goals, objectives, resources and the team, which form the foundation of the business. The course integrates various business functions with the intent of helping students understand start-up, growth, venture capital, the role of talent, operations, and marketing.

Prerequisite(s): ACCT-105 or BUSN-100 or BUSN-130 Corequisite(s): none

BUSN 255 Human Resource Management 3 cr. Specific attention is placed in this course on the day-to-day administrative and management procedures necessary to support the workforce included are matters of recruiting, selecting and hiring personnel, legal requirements that govern records and interactions with employees, rules and regulations covering termination, task definition, and training.

Prerequisite(s): none Corequisite(s): none

# BUSN 260 Business Law

3 cr.

This course will provide a foundation for business managers to operate within the legal environment in which all businesses in our society function It provides an overview of the law and our legal system, covering topics such as Tort Law, contract and sales law, negotiable instrument law, agency and employment law, business organizations and property law.

Prerequisite(s): ENGL-100 Corequisite(s): none

#### BUSN 265 Business Problem Solving 3 cr.

A capstone course for the second year student, this study plan is fast-paced and dynamic Students are challenged to use their learning to confront structured and unstructured problems with confidence and creativity. Experience in using multi-disciplinary skills is stressed. While problems are primarily business oriented, themes also include the interaction between business and government or business and society.

Prerequisite(s): none Corequisite(s): none

#### BUSN 275 Business Internship

This course is designed to introduce the student to the practical work environment in their interested field of business study The internship will be supervised, approved and monitored during the semester. A minimum of 180 hours must be worked during the semester. The student will keep a weekly log of their activities and experiences and will prepare an in-depth research paper on their organization to be reviewed by the instructor.

Prerequisite(s): ACCT-105, BUSN-100

Corequisite(s): none

Cardiovascular Courses (CARD)

#### CARD 100 Intro to Cardiovascular Tech 3 cr.

This course is designed to provide students with an overview of cardiovascular procedures, the history of cardiovascular medicine, professional organizations and affiliations, internships, legal and ethical responsibilities in patient care, clinical indications for cardiac testing, medical terminology, HIPAA standards in healthcare, and living wills.

Prerequisite(s): Program Acceptance

Corequisite(s): none

#### CARD 105 Medical Instrumentation 3 cr.

This course is designed to give entry-level cardiovascular students an overview of electronic circuits, their components and the manner in which they function and operate medical equipment Students will have a working knowledge of physiologic recording systems and the various functions they provide, with emphasis placed on electrical safety in the healthcare setting.

Prerequisite(s): Program Acceptance

Corequisite(s): none

## CARD 115 Non-Invasive Testing 3 cr.

This course emphasizes electrocardiogram (EKG) arrhythmia recognition in the health care setting. Review of the cardiac conduction system and its relation to mechanical events in the cardiac cycle will provide the basis for understanding interpretation of cardiac rhythm strips and 12 lead electrocardiograms. Assessment of normal and abnormal rhythms will be completed. Additionally, the utilization of ambulatory EKG monitoring and exercise testing will be discussed.

Prerequisite(s): Program Acceptance, BIOL-135, BIOL-

Corequisite(s): none

#### CARD 125 Clinical Practicum I 1 cr.

All students will rotate through the clinical affiliate hospitals. Students will be assigned to select

departments (cardiac catheterization, echocardiography, non-invasive cardiology, and the ambulatory cardiac care unit). The rotations are primarily observational and provide students with the opportunity to see the diagnostic and interventional tests and procedures performed on patients with cardiovascular disease. Limited performance of noninvasive tasks under direct supervision is permissible.

Prerequisite(s): BIOL-135, BIOL-136 Corequisite(s): CARD-100, CARD-105

## CARD 150 Invasive Cardiovascular Tech I 3 cr.

This course is designed to provide an in-depth study of cardiovascular physiology, including circulatory hemodynamics, cardiac output and control mechanisms. electrophysiology and mvocardial mechanics. The course will also include a review of angiographic techniques, right and left heart catheterization protocols for diagnosis of ventricular function abnormalities, assessment of coronary anatomy, and hemodynamic waveform morphology analysis in the clinical setting.

Prerequisite(s): CARD-100, CARD-105, CARD-115,

HLTH-155

3 cr.

Corequisite(s): NURS-100, CARD-155

#### CARD 155 Invasive Cardiovascular Tech Lab I 1 cr.

This laboratory is designed to provide a simulation experience in which students will learn to prepare manifold systems, cardiac catheters, guide wires, needles and sheaths Students will also utilize cardiac output machines, oximeter and defibrillator/cardioverters. Students will acquire a working knowledge of pacemakers and ICD's, and will learn hemodynamic analysis data.

Prerequisite(s): CARD-100, CARD-105, CARD-115,

HLTH-155

Corequisite(s): NURS-100, CARD-150

## CARD 160 Cardiovascular Physiology/Patho I 2 cr.

This course includes the review of cardiovascular anatomy and structural relationships with the cardiopulmonary and vascular system The function and regulation of the heart and blood vessels, cellular structure and function, electrical activity and cardiovascular integration and adaptation will be discussed. Heart sounds and murmurs will be reviewed as will blood pressure regulation. The study of cardiovascular pathophysiology will include an indepth review of various cardiac diseases, related etiology and treatment options including: ischemic cardiac disease, heart failure, and valvular heart disease.

Prerequisite(s): CARD-100, CARD-105, CARD-115, BIOL-135. BIOL-136

Corequisite(s): none

# CARD 165 Ultrasound Physics

3 cr.

3 cr.

This course is an introduction to the principles of ultrasound physics, instrumentation and theory relevant to the Cardiac Sonographer and Ultrasonographer. Concepts discussed will include: math for physics review; ultrasound physics; transducer construction and characteristics; sound beam formation and characteristics; instrumentation; image storage and display; Doppler instrumentation and principles; artifacts and bio-effects.

Prerequisite(s): RESP-115 Corequisite(s): CARD-170

# CARD 170 Echocardiography I

This course is designed to provide Cardiovascular Technology students with the foundations of Echocardiography. The course will provide an explanation of cardiac ultrasound and its use in the evaluation of normal and abnormal cardiac anatomy. The course will also provide students with the knowledge necessary to determine the presence of cardiac diseases and pathology as seen during an echocardiographic exam. A review of the various medical and surgical treatments used in the care of patients with cardiac disease will be included in the course. Basic machine mechanics, basic physics as related to ultrasound, two-dimensional, M-mode, Doppler, and Color Doppler techniques will be covered.

Prerequisite(s): BIOL-135, BIOL-136

Corequisite(s): CARD-165

#### CARD 175 Clinical Practicum II 4 cr.

This course includes 240 clinical hours. The students will learn and practice skills in aseptic technique, infection control, patient monitoring, as well as pre and post-procedure patient care, for invasive and noninvasive diagnostic and therapeutic procedures. This 6week summer clinical rotation will include clinical in assignments open-heart surgery, cardiac rehabilitation, cardiac catheterization and/or echocardiography. Lab assignments will take place at Southern Maine Community College and clinical rotations will include hospitals experiences throughout Southern and Central Maine and Southern New Hampshire.

Prerequisite(s): CARD-150, CARD-155, CARD-160,

CARD-165, CARD-170, HLTH-155

Corequisite(s): none

CARD 180 Rehabilitation and Prevention 3 cr.

This course is designed to introduce students to the cardiac rehabilitation continuum of care, and to help students acquire an applied knowledge and appreciation for cardiovascular disease prevention. Relevant risk factors will be discussed and examined. The function of exercise in disease prevention will be emphasized and studied, as well as the role nutrition plays in optimizing cardiovascular health.

CARD 200 Invasive Cardiovascular Tech II 3 cr. This course is designed to provide an in-depth study of Interventional Cardiology and complements materials from Invasive Cardiovascular Technology I. Instruction includes: percutaneous coronary intervention, permanent pacemakers, bi-ventricular cardiac devices, cardiac biopsy, intra aortic counterpulsation, electrophysiology studies, and cardiac ablation.

Prerequisite(s): CARD-150, CARD-155

Corequisite(s): none 3 cr.

# CARD 210 Cardiovascular Physiology/Patho II 2 cr.

This course continues the evaluation of cardiovascular physiology and disease from Cardiovascular Physiology and Pathophysiology I and provides in-depth review of hypertensive heart disease, cardiomyopathy, diseases of the pericardium and congenital malformations. Neurohumoral control of the heart and microcirculation mechanisms will be reviewed.

Prerequisite(s): CARD-160 Corequisite(s): none

# CARD 215 Vascular Imaging and Pathology 3 cr.

This course provides fundamental knowledge for vascular diagnostic & interventional testing and vascular pathology. An overview of current testing techniques in ultrasound imaging, angiography, vascular MRI and Computed tomography (CT) will be provided. This course includes a review of vascular pathophysiology and current medical therapy. Physiology and hemodynamics of normal and diseased vessels will be reviewed. Risk factors associated with vascular disease will complete the course.

Prerequisite(s): CARD-150, 155 or CARD-165, 170

Corequisite(s): none

# CARD 220 Echocardiography II 3

This course is a continuation of the principles learned in CARD-170. The echocardiography student will learn more detailed applications for the use of Doppler ultrasound and in the determination of systolic and diastolic dysfunction; review disease pathologies such as cardiac tumors; and learn performance techniques for the evaluation of pericardial disease. Students will also be introduced to the echo findings commonly associated with of congenital heart disease in the adult and child. An introduction to advanced applications

associated with of echocardiography will include: Transesophageal Echo (TEE), stress echo, vascular ultrasound, contrast echocardiography use and 3-D echocardiography.

Prerequisite(s): CARD-165, CARD-170

Corequisite(s): none

#### CARD 225 Clinical Practicum III 6 cr.

This clinical rotation is designed for students who have chosen one of the four clinical areas as a career-training path. Students will spend 24 hours per week in the hospital setting gaining knowledge and expertise in one of the following areas: cardiac cath lab, echocardiography, non-invasive electrocardiography, or anesthesia monitoring within the operating room.

Prerequisite(s): CARD-175 Corequisite(s): none

#### CARD 275 Clinical Practicum IV 12 cr.

This clinical course is for students wishing to purs ue a career in one of the four employment opportunities within the CV Technology program The student will spend 40 hours per week in their designated specialty: cardiac cath lab, echocardiography, non-invasive testing, or as a member of the anesthesia monitoring team.

Prerequisite(s): CARD-225 Corequisite(s): none

Chemistry Courses (CHEM)

#### CHEM 103 Chemistry/Emergency Responders 3 cr.

This survey, non-laboratory class, is designed to acquaint students with the broad principles of chemistry as they relate to hazards in the emergency response field. This survey includes basic chemistry terminology, structure of matter, atomic bonding, molecular theory of matter, chemical and physical change, and the general states of matter (gases, liquids and solids). Discussion of more common elements, compounds they form, and the resulting hazards completes this course.

Prerequisite(s): none Corequisite(s): none

#### CHEM 100 Fundamentals of Chemistry 4 cr.

Fundamentals of Chemistry is a one-semester, standalone survey course for non-science majors. Fundamental principles, terminology, and applications of inorganic, organic, and biochemistry are introduced, as well as basic laboratory techniques. The course relates chemical concepts to everyday life through analysis and discussion of fundamental principles, and will enable students to make better-informed

decisions regarding their health, their community, and the world they live in.

Prerequisite(s): ENGL-050, ENGL-075, MATH-050

Corequisite(s): none

## CHEM 120 General Chemistry I 4 cr.

This is the first semester of a two-semester college chemistry sequence. The topics discussed begin with physical and chemical property definitions and dimensional analysis. Chemical reactions and reaction stoichiometry are studied in the context of aqueous solutions. Types of aqueous reactions are investigated (i.e., acid/base, oxidation/reduction) as well as quantitative aspects of the reactions (i.e., molar solutions, dilutions, titrations, limiting reagents, reaction yields). Topics in gaseous-state chemistry and introduction to basic thermodynamics, quantum theory, electronic structure of atoms, basic chemical bonding, molecular geometry and molecular orbitals follow the reaction chemistry section.

Prerequisite(s): ENGL-050, ENGL-075 Corequisite(s): MATH-140 or MATH-145

## CHEM 125 General Chemistry II

This course is the second semester of a two-semester college chemistry sequence. Topics covered start with a brief discussion of the physical properties of liquids, solids and solutions. The major focus of this course will be chemical equilibriums and the applied aspects in solution chemistry. Topic areas include reaction kinetics, equilibrium reactions and calculations as applied to solutions, gas-phase reactions, acid/base reactions, buffers, and solubility. Also, entropy, free energy and equilibrium will be discussed before covering electrochemistry.

Prerequisite(s): CHEM-120 Corequisite(s): none

Criminal Justice Courses (CJUS)

#### CJUS 105 Intro to Criminal Justice

This course offers an orientation to careers in law enforcement — their philosophic base and historic development; agencies and processes; technical and legal problems, and the role of criminal justice in a democratic society.

Prerequisite(s): none Corequisite(s): none

#### CJUS 110 Police Operations

3 cr.

4 cr.

This course deals with the everyday problems, situations and operations of the police department and the police officer. Included in the course is a study of the different career paths open in this area. It is basically a study of the patrol officer's function with a

background to the entire organization. The deployment of personnel, tactical operations and the use of specialized equipment will be presented. Ethical and legal standards related to the patrol function will be covered.

Prerequisite(s): none Corequisite(s): CJUS-105

#### CJUS 115 Introduction to Criminology 3 cr.

This course will define crime and evaluate the various ways crime is measured. Students will be provided with an overview of the more popular criminological theories, emphasizing the biological, psychological and sociological schools of thought. In addition, crime control and prevention strategies as they relate to each theory will be examined in terms of theory, practice and effectiveness.

Prerequisite(s): none Corequisite(s): CJUS-105

#### CJUS 120 Introduction to Corrections 3 cr.

This course takes a practical approach to introducing students to the ideas and practices of modern corrections and skills required to succeed in the field. Included in this course are society's goals for correctional institutions, an overview of the correctional function, the everyday operations of correctional prisons and jails, and procedures of parole and probation. A central theme throughout the course will be professionalism in corrections.

Prerequisite(s): none Corequisite(s): CJUS-105

#### CJUS 125 Criminalistics

3 cr.

This course deals with the study of the scientific investigation of crime scenes, criminal evidence and evidence handling techniques. This course deals with the theory and application of police and scientific principles involved in solving crimes.

Prerequisite(s): none Corequisite(s): CJUS-105

#### CJUS 130 Laws of Arrest, Search,& Seizure 3 cr.

This course is designed to present the background and current information about the laws pertaining to arrest, search and seizure. It will explore the development of standards in the police field by examining the issues involved in the Fourth, Fifth, and Sixth Amendments to the U.S. Constitution, State Laws and Court interpretations.

Prerequisite(s): none Corequisite(s): CJUS-105

#### CJUS 135 Case Preparation

3 cr.

This course is designed to teach students proper methods in which to prepare a case for possible court presentation. Included in the course will be appropriate information gathering techniques; report writing; and pre-court preparation. Proper courtroom procedures, witness styles and behavior will also be discussed. Legal standards related to acquiring information by police officers will be presented.

Prerequisite(s): none Corequisite(s): CJUS-105

## CJUS 140 Juvenile Justice System

3 cr.

An examination of the impact of family, school, community and abuse on the conduct of juveniles will be undertaken. Past and current theoretical approaches to delinquency will be discussed. General topics of: gangs; delinquency and violence in schools; the Juvenile Court system; behavior modification programs; federal funding; law enforcement's role; as well as juvenile corrections and probation will be studied. The Maine Juvenile Code will be examined.

Prerequisite(s): CJUS-105 Corequisite(s): none

#### CJUS 200 Rules of Evidence

3 cr.

This course is designed to acquaint the student with the Rules of Evidence. The purpose of these rules is to determine the admissibility of evidence during the criminal trial process and the legal challenges available to the opposing side. It also covers the legal requirements for a wide range of evidence, i.e.: real and circumstantial; best evidence rule; privileged communication; the Hearsay Rule; etc.

Prerequisite(s): CJUS-105, CJUS-130

Corequisite(s): none

#### CJUS 205 Criminal Investigation

3 cr.

Criminal Investigation is an observation or inquiry into allegations, circumstances or relationships in order to obtain factual information. This course deals with the duties and responsibilities of the investigator/detective/patrol officer in the course of an investigation.

Prerequisite(s): CJUS-105 Corequisite(s): CJUS-135

#### CJUS 215 Substantive Criminal Law

This course is designed to acquaint the student with the history of criminal law, the necessary elements of an offense which must be proven to sustain a criminal conviction, and the defenses to criminal conduct. A comprehensive study of Maine's Revised Criminal Code, Title 17-A is a major part of this course.

Prerequisite(s): CJUS-105, CJUS-130, CJUS-200

Corequisite(s): none

#### CJUS 220 Seminar in Criminal Justice 3 cr.

This course is designed to acquaint the student with a variety of issues, some controversial, that confront the criminal justice community. The emphasis will be on reading about these issues and then in-depth discussion in a seminar setting. In addition, classroom time will be spent on preparing the student for employment. In furtherance of this goal, there will be discussion of the employment procedure, with emphasis on the application process and oral interviews. Prospective employers will be invited to participate in discussions with students.

Prerequisite(s): CJUS-105 Crequisite(s): none

#### CJUS 225 Community Policing

This course studies the evolution of policing to the present day. Community policing is compared and contrasted with traditional policing organizations and management styles. Community policing theory and the identification of community problems underlying crime will be examined relating to the process and strategy of change. Problem solving effectiveness of community policing as a law enforcement strategy will

be considered. A community service learning project

for each student is an integral part of this course.

Prerequisite(s): CJUS-105 Corequisite(s): none

#### CJUS 230 Crime Scene Reconstruction I 4 cr.

This course provides students with the knowledge of the principles of effective crime scene management. Topics include: physical evidence collection and preservation, laboratory analysis, legal and practical documentation of evidence, and criminal investigation protocols. Students will engage in extensive laboratory work and analysis, review of case studies, and handson work at mock crime scenes, which will prepare them to present the results of their crime scene investigations in court. The course is designed for students pursuing a career as a crime scene technician.

Prerequisite(s): CJUS-105, CJUS-125 (C or better), CJUS department approval

Corequisite(s): none

#### CJUS 235 Crime Scene Reconstruction II 4 cr.

The second course in the crime scene reconstruction sequence, this course will build on the work in Crime Scene Reconstruction I. Students will examine additional and more advanced techniques related to the collection, preservation and analysis of crime scene evidence used in a court of law. This course

provides students with the knowledge of the principles of effective crime scene management. Topics include physical evidence collection and preservation, laboratory analysis, legal and practical documentation of evidence, and criminal investigation protocols. Students will engage in extensive laboratory work and analysis, review of case studies, and hands-on work at mock crime scenes, which will prepare them to present the results of their crime scene investigations in court. The course is designed for students pursuing a career as a crime scene technician.

Prerequisite(s): CJUS-105, CJUS-125 (C or better), CJUS-230, CJUS department approval

Corequisite(s): none

3 cr.

## CJUS 240 Comparative Criminal Justice 3 cr.

Comparative Criminal Justice is an observation of the varying forms of law enforcement as practiced on an international basis. This course addresses the organization and practices of foreign law enforcement agencies and how they compare with the American system of criminal justice. Students will travel to Ireland to compare the policing experience of Ireland during the one-week spring semester break to that of the United States.

Prerequisite(s): CJUS-105 Corequisite(s): none

#### CJUS 250 Criminal Justice Internship 3 cr.

This course provides an opportunity for a student to work in the field of criminal justice. Students will spend a prescribed period of time working within a local criminal justice or public safety agency.

Prerequisite(s): CJUS-105, 3.2 GPA, and

CJUS department approval Corequisite(s): none

## Computer Technology Courses (CMPT)

# CMPT 100 Intro to Computer Technology 4 cr. This course is an introduction to the technical aspects of the systems used in the management of information in the 21st century. Topics to be discussed shall include microcomputer system hardware, file systems,

include microcomputer system hardware, file systems, operating systems, network configuration, topology and security, various aspects of the Internet and how to manage and manipulate the myriad types of information that is accessed by these systems. The class time is a combination of lecture and hands-on

Prerequisite(s): none Corequisite(s): none

activities.

**CMPT 101** Intro to Computer Applications 3 cr. This course provides a comprehensive study of the basic skills needed to manage, maintain and operate microcomputer hardware and software. The majority of the course includes an overview to a graphical user interface and an integrated software applications package, including information management programs such as word processing, electronic spreadsheets and presentation graphics that will be used to develop practical problem solving skills at the entry level. Topics include an overview of the components of a microcomputer system; hardware and software; storage devices and media; interpretation of error messages; a computer literate vocabulary and the uses of the computer.

Prerequisite(s): none Corequisite(s): none

# CMPT 105 Intro to Web Programming 4 cr.

This course is designed to introduce the student to the HTML and PERL scripting languages while using a live CD as the operating system platform. The student will develop an understanding of the basic concepts used to display information and products on the Internet. First, through the use of html programming the student will develop his / her skills to present ideas, concepts and products on the Internet in a professional manner. Secondly, the student will learn to effectively create back-end programs to present and collect data inputted by the user through the use of Perl scripting. By completion of the course the student will have an understanding of the basic scripting structure, components and syntax. Students registering for this course are expected to be familiar with the common functions of microcomputer operating systems and applications.

Prerequisite(s): none Corequisite(s): none

#### CMPT 110 Introduction to Databases

This course provides an introduction to Databases using Access 2007 as the interface tool. Topics include creating, querying, and maintaining a database; creating a data access page, reports, forms, combo boxes; using OLE fields, hyperlinks, and sub forms; and creating an application system using the Switchboard Manager. This course will utilize working in groups to emphasize how to plan, create and implement a project in the business setting. A student can expect to spend 4 hours on homework outside the classroom a week. Students registering for this course are expected to be familiar with the common functions of microcomputer operating systems and applications.

Prerequisite(s): none Corequisite(s): none

#### CMPT 115 Microcomputer Hardware

This is a hands-on course where the student shall practice disassembly, reassembly, and configuration of X86 based microcomputer system units. Topics discussed during this course shall include: microcomputer hardware components including CPU's, hard drives, memory, CPU sockets, video cards, sound cards, NIC's, monitors and printers; microcomputer hardware assembly and disassembly techniques; safe working procedures; microcomputer hardware configuration using various operating systems; microcomputer hardware troubleshooting; microcomputer hardware maintenance and repair. The class time for this course is a combination of lecture and hands-on exercises.

4 cr.

3 cr.

3 cr.

Prerequisite(s): CMPT-100 Corequisite(s): none

## CMPT 120 Open Source Operating Systems 4 cr.

This course will provide the student with a chance to explore an Open Source operating system technology. It will stress the use of command line in installing and configuring a Linux server. The student will develop skills in using command line maintenance of users, files, directories and permissions. The student will learn to create print servers, troubleshoot system problems, setup network connectivity and seamlessly integrate the Open Source server with Windows clients. This course will provide the student with online reference materials and hands-on exercises based on real world examples.

Prerequisite(s): none Corequisite(s): none

3 cr.

# CMPT 125 Structured Programming

This course provides an introduction to Java Programming. Topics include creating a Java application and applet, manipulating data using methods, decision making and repetition with reusable objects, arrays, loops, and layout managers using external classes, creating menus and button arrays using the abstract windows toolkit, swing interfaces with sorting and searching, and writing data to a sequential data file. Students registering for this course are expected to be familiar with the common functions of microcomputer operating systems and applications. Students should expect to spend a minimum of six hours a week outside of class time working on assignments and concepts to be successful.

Prerequisite(s): none Corequisite(s): none

#### CMPT 151 Spreadsheet Applications

The purpose of this course is to familiarize students with electronic spreadsheet development using

Microsoft Excel. In this intensive hands-on course, students will create various types of worksheets for personal and professional uses. Emphasis will be placed on problem solving and developing quality worksheets using concepts and techniques found in most spreadsheet software. This course covers all basic skills and techniques and several advanced topics including how to design and print graphs and charts; develop worksheets for "what-if", "goal-seek" and "sensitivity" analysis; generate reports; use mathematical, financial, statistical, logical as well as date and time functions; generate reports; use database operations; and develop and use macros.

Prerequisite(s): MATH-020, ENGL-050

Corequisite(s): none

CMPT 210 **Applications in Software** 3 cr. This course will cover advanced topics in database software development. Students will learn normalization of data structures, prototyping applications, events, dynamic arrays, error handling, key violations, interactive windows and special topics dealing with database programming on a network. The student will be able to write complete, complex "turnkey" applications that are ready to run.

Prerequisite(s): CMPT-110, CMPT-125

Corequisite(s): none

# CMPT 215 Microsoft Operating Systems 3 cr.

This course covers the installation, configuration, and maintenance of Microsoft Windows. The operating systems utilized in this course include various current versions of Microsoft Windows operating systems. Other topics covered in this course shall include Windows desktop deployment, Windows desktop restrictions, and networking in peer to peer and client server environments. The class time for this course is a combination of lecture and hands-on practice.

Prerequisite(s): CMPT-100 Corequisite(s): none

CMPT 220 Network System Management 3 cr. This course is an introduction to network operating systems with an emphasis on the management of network objects eg. users, groups, volumes, print servers and other shared network resources. Other topics to be covered in this course will include: physical and logical network topologies, network media and network distribution devices. The operating systems utilized in this course include various current versions of Microsoft Windows client and server operating systems. The class time is a combination of lecture and hands-on practice.

Prerequisite(s): CMPT-100

Corequisite(s): none

# CMPT 225 Network Engineering

This course looks at networking from a design perspective. Topics will include, but not be limited to TCP/IP, DNS, DHCP, BOOTP, firewalls, routers, bridges, switches, wiring, ethernet, web servers, virtual hosting, SNAT/DNAT, and IP sub-netting. The OS for this class will be Linux (Slackware distribution). The class will be a combination of lecture/lab.

Prerequisite(s): CMPT-115, CMPT-120, CMPT-125 Corequisite(s): none

## CMPT 230 Senior Internship

3 cr.

3 cr.

3 cr.

3 cr.

This course is designed to give the student practical experience to enter the job market. Students will be required to complete 135 documented hours of work as an intern in the information technology department of a company, institution, or organization.

Prerequisite(s): 30 credits toward major

Corequisite(s): none

## CMPT 235 Senior Seminar

This Senior Seminar will provide the student an opportunity to explore areas of individual interest, share research and lead discussions. Students will research, prepare and present a major topic during the semester. Students will also prepare an electronic portfolio showcasing skills they have developed. During the first few weeks, the instructor will assign several mini-projects for the students to research and complete within a given time period.

Prerequisite(s): CMPT-120, CMPT-125, CMPT-215

Corequisite(s): none

## CMPT 240 Power Linux

This course looks at the Linux operating system and various open source applications that run on Linux. Since Linux came on the scene in 1992, it is rapidly becoming a viable alternative to Microsoft. The class will take an in-depth look at Slackware, Red Hat and Mandrake Linux distributions. The topics shall also include working with a wide variety of open source applications that have made Linux so popular. The class will be a combination of lecture / lab.

Prerequisite(s): CMPT-100, CMPT-105

Corequisite(s): none

## CMPT 245 Web Server Management 3 cr.

This is a course on the installation and configuration of Internet Information Server service to create a virtual web server that is a host for multiple Web sites. Topics to be covered in this course shall include the management and configuration of SharePoint Server,

Front Page Extentions, Web-based IIS administration tools, DNS service, and the FTP, POP3, and SMTP services.

Prerequisite(s): CMPT-215, CMPT-220

Corequisite(s): none

CMPT 250 Advanced Server Management 3 cr.
Server Operations is a course that deals with the management of Active Directory Services in Windows Server domains and is based upon the sections of the MSCE exam. Topics to be covered shall include active directory DHCP, DNS; AD system state maintenance, recovery, and restore; FSMO (Flexible Single Master Operations), AD migration, and other common scenarios. The course time will be a combination of lecture and hands-on lab work.

Prerequisite(s): CMPT-100, CMPT-105, CMPT-215,

CMPT-220

Corequisite(s): none

#### CMPT 255 Network Security

3 cr.

Network security has become of paramount importance in the 21st century. The securing of network services, network devices, and network traffic can be a full-time job. In this course the student shall build on their existing knowledge of operating systems, hardware and network systems management as the student acquires the specific skills to implement security services on any type of computer network. This course is a combination of lecture and hands-on exercises and will emphasize network security issues in Microsoft Windows products. The course content is based upon the Comp TIA Security+ exam.

Prerequisite(s): CMPT-215, CMPT-220

Corequisite(s): none

#### CMPT 260 Java Programming

3 cr.

This course will address the fundamentals of the Java Programming language. This course will cover the basics of concepts and methods of object-oriented programming and object-oriented design and emphasize the development cycle as a means of creating applications. Illustrating well-written and readable programs using disciplined coding styles will also be discussed. The course time will be a combination of lecture and hands-on lab work.

Prerequisite(s): CMPT-110, CMPT-125, CMPT-120

Corequisite(s): none

## CMPT 265 C# Programming

3 cr.

The goal of this course is to provide a comprehensive introduction to programming using C#. This course introduces the basic programming constructs of simple sequence, selection, and iteration. The course shows

how to create a number of different types of applications including console-based Windows based applications. The event-driven programming model, which is based on interactively capturing and responding to user input on Windows and Web forms, is covered. It includes instruction on developing applications using rapid application development techniques illustrating the drag-and-drop construction approach. From the beginning, the course illustrates how to use the .NET predefined types, their member methods, data fields, and properties using an object-oriented approach to development. The course also illustrates how to create user-defined classes and stand-alone class libraries, and introduces a number of advanced object-oriented concepts.

Prerequisite(s): CNMS-110 or AEDD-105 or CMPT-210

Corequisite(s): none

## CMPT 275 Programming in C

3 cr.

A study of the C+ programming language on Linux including: control structures, functions, pointers, structures, Linux programming commands, good programming practices. The class will include a fair number of programming projects.

Prerequisite(s): CMPT-110, CMPT-125

Corequisite(s): none

#### CMPT 285 Network Hardware 3 cr.

This course familiarizes students with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces routing protocols, network standards, LAN / WAN transmission technologies, and other related topics. The course will consist of lectures and hands-on exercises, in configuration, installation, and troubleshooting.

Prerequisite(s): CMPT-220, CMPT-225

Corequisite(s): none

Communications and New Media Courses (CNMS)

#### CNMS 105 Intro to Mass Communication 3 cr.

We can watch the media as detached outsiders—as observers, we can praise them when they perform well and blame them for our social predicaments. Or we can become active participants—we can analyze the impact and investigate the consequences of the stories that media industries tell and sell. We can challenge our media to perform at high levels and steer them to serve and preserve democratic ideals. And as involved citizens, we can be aware of the consequences of the business of media and we can give voice to the issues that matter most to us and that most affect our daily lives. Each week in this class, students will be armed with the tools necessary to

navigate this cultural terrain. Students will be asked to participate in the critical work of evaluating mass media and shaping their direction.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### CNMS 110 Computer Communications 3 cr.

This course is designed to familiarize students with computer operating systems, software, hardware and networks with an emphasis toward video and media production The course will focus on using operating systems and network protocols for media file management over networks. The structure of the Internet and basic TCP/IP protocols will also be covered. Students will be assigned tasks on various aspects of computer hardware, file management and networking.

Prerequisite(s): Program acceptance

Corequisite(s): none

## CNMS 111 Digital Imaging, Design & Illust. 3 cr.

Students will be introduced to the tools used in digital drawing, imaging and design, using the Adobe Creative Suite. Through the use of step-by-step tutorials, individual classroom instruction, guest lecturers and class discussions, students will be exposed to many facets of this powerful graphics package and its use in the industry. Examples of recent work by computer graphic artists will be shown and discussed. Students will examine the ever-growing applications of computer graphics and learn to recognize techniques used in the industry today.

Prerequisite(s): Program Acceptance

Corequisite(s): none

#### CNMS 115 Foundations of Visual Design 3 cr

This course introduces students to the principles of 2D design and the role of images and forms as a means of communication Through a series of hands on projects, students will develop a critical eye towards evaluating effective design. Topics include Gestalt theory, additive and subtractive color theory, design research techniques and effective communication strategies.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### CNMS 120 Introduction to Digital Imaging 3 cr.

This introductory course will focus on the creation, compositing and manipulation of digital images using Adobe Photoshop and Illustrator Topics to be covered will include digital color theory, scanning techniques, masking, optimizing images for the web and advanced brush and filter techniques. A series of hands on tasks

will develop the student's ability to work with digital imagery.

Prerequisite(s): CNMS-111 Corequisite(s): none

#### CNMS 125 Writing for Media

3 cr.

Students will learn to apply basic communication skills to the A/V medium Those skills include identifying audiences and developing effective concepts for programs. Organizational formats for both formal and informal presentations are examined in detail. Students will develop a treatment, content list and two levels of scripts. Final written documentation and oral presentations will be used to develop portfolio level work.

Prerequisite(s): Program acceptance

Corequisite(s): none

## CNMS 135 Introduction to Digital Design 3 cr.

Students will become knowledgeable in the use of Adobe In Design to produce documents which are of professional typesetting quality using a laser printer and a color ink jet printer Students will work with templates, prepare and use style sheets, import graphics, place text, select fonts and prepare a variety of desktop publishing projects.

Prerequisite(s): CNMS-111 Corequisite(s): none

#### CNMS 155 History of Mass Communication 3 cr.

From cave art to the internet; mass media have shaped human history and perception But avenues of communication to an audience also follow their own timeline, driven in large part by technological revolutions. Students will trace that evolution up to the present moment, as one-way communication to groups is being replaced by inter-activity. Oral and written assignments will foster an understanding of the link between culture and media, and the important turning points in media history. Students will also write personal narratives about the way media has shaped their memories, or the memories of an earlier generation, and they will track down examples of vintage media to share with classmates.

Prerequisite(s): none Corequisite(s): none

#### CNMS 160 Video & Audio Production Basics 3 cr.

This course is an introduction to basic video production skills in a studio environment Topics include; camera operation, audio mixing, lighting, use of microphones and use of special effects systems. Strong emphasis is placed on developing critical viewing skills (technical and conceptual). Students are

also expected to research and report on changes in the television industry.

Prerequisite(s): Program acceptance

Corequisite(s): none

## CNMS 165 Website Production

3 cr.

This is an intermediate level course designed to provide students with the basic skills to author HTML web pages Students will learn to code HTML, incorporate images in web pages and embed various types of media. Web page layout with CSS, JavaScript and CGI forms will also be covered. An emphasis will be placed on emerging XHTML and XML technologies.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### CNMS 180: Intro to Digital Illustration 3 cr.

Students will learn all about vector graphics and how to use Adobe Illustrator. Examples and complete exercises will demonstrate Illustrator's most important features such as drawing, creating logos and graphics, creating special effects and manipulating type. Graphics can then be used for export to InDesign, Photoshop and Flash.

Prerequisite(s): CNMS-111 Corequisite(s): none

## CNMS 205 Advanced Digital Imaging

This course explores advanced production techniques using Adobe Photoshop for the production of images for print, web and video production. Students will learn advanced design and image manipulation techniques, generate original art works, participate in peer reviews of work and observe the history and social impact of digital manipulation. Hands on demonstrations, lectures and class studio time will be supplemented by tutorials and lessons from a variety of sources.

Pre Req: CNMS-120, CNMS-115

Corequisite(s): none

#### CNMS 210 Adv. Video & Audio Productio 3 cr.

This course concentrates on teaching students how to design and organize a professional video or project The role multimedia of project a Producer/Director will be followed in depth. Students will learn how to work with clients, build a budget and create a production flow-chart.

Prerequisite(s): CNMS-110, CNMS-125, CNMS-160

Corequisite(s): none

#### CNMS 211 Adv. Video & Audio Applications 3 cr. This advanced production course is designed for

students who have developed and pre-produced

projects as part of the CNMS-210 Advanced Video/Audio Production course. Students will work together as a production unit and will be assigned a variety of crew positions needed to support the acquisition of material needed to complete a designed project. Projects may involve both "location" and studio shoots. The class will meet on a weekly basis to develop production schedules and discuss relevant issues related to the projects. Students will be expected to work outside of the scheduled course meeting time and should be prepared to adjust schedules as needed. Students are expected to be working at an "advanced level" and should be prepared to work with a wide variety of subject matter.

Prerequisite(s): CNMS-110, CNMS-125, CNMS-160

Corequisite(s): CNMS-210

#### CNMS 215 Video & Audio Streaming Tech 3 cr.

This course is designed to introduce New Media students to the production of video for Internet and broadband technologies Emphasis is placed on digital video technology theory including: bandwidth, capturing video. compression and streaming architectures.

Prerequisite(s): CNMS-110 Corequisite(s): none

# CNMS 220 Video and Audio Engineering

Primarily a lecture course designed to familiarize the student with the technical side of video production Emphasis is placed on giving students a solid foundation in the theory behind video technology. Topics include: video and audio signals, signal flow within systems, time-base correction, digital signal composition, HDTV and video compression. Students also research and report on various technical changes taking place in the industry.

Prerequisite(s): CNMS-110 Corequisite(s): none

#### CNMS 225 Interactive Multimedia Basics

This course is designed to introduce students to multimedia production techniques Students will use a flowchart program to layout project concepts. Multimedia authoring will be done with Macromedia Flash 8. Topics to be covered include animation, interactive scripting, video & audio assets and Shockwave publishing techniques. Weekly reading assignments and in-class tutorials will provide hands on approach to learning.

Prerequisite(s): CNMS-110, CNMS-111 or 120

Corequisite(s): none

3 cr.

Working outside of the studio environment, students will learn basic ""on location"" video production skills. Using basic field production equipment students will shoot and edit simple exercises designed to build good on location habits. Through the exploration of a wide range of audio and video tools, commonly used on location, students will learn how to recognize and solve potential problems. Emphasis will be placed on developing strong pre-production planning and research skills.

Prerequisite(s): CNMS-160 Corequisite(s): none

#### CNMS 235 Computer Animation Basics 3 cr.

This advanced computer graphics course is designed to introduce students to 3D animation Topics covered will include mesh and spline modeling, surface mapping, lighting, camera techniques and animation basics. While primarily hands on task based course, additional and supplemental material will be covered in a series of class lectures. Various examples of 3D animation will be shown and critiqued. Students will have the opportunity to design and execute 3D animations suitable for use in an interactive portfolio or a demo reel.

Prerequisite(s): CNMS-110, CNMS-111 or 120

Corequisite(s): none

#### CNMS 240 Non-Linear Editing Essentials 3 cr.

This course is an introduction to video editing theory and techniques, and involves extensive work with non-linear editing systems and related digital post-production equipment Students may choose to edit material they have shot in the field or use tutorial footage. The course will take a hands-on, project approach to learning the techniques of non-linear editing.

Prerequisite(s): CNMS-160 Corequisite(s): none

#### CNMS 245 Advanced Computer Animation 3 cr.

Advanced Computer Animation is a course designed to examine the realm of character animation. Students will learn techniques using 3D software that are applicable to both the gaming and entertainment industries. Topics will include low-polygonal modeling, texture mapping, character rigging, radiosity and special effects. The class will be taught with a combination of lectures, examples and tutorials. Students are expected to have prior experience with 3D animation software including modeling, texture mapping, lighting and forward kinematic animation.

Prerequisite(s): CNMS-235 Corequisite(s): none

#### CNMS 250 Introduction to Documentary 3 cr.

"Reality Programming from Nanook of the North to Survivor". Documentaries or "reality television" are becoming the programming of choice for television networks and cable channels - they are also being used to manipulate, persuade, and entertain us. It is becoming increasingly difficult to tell the difference between fiction or non-fiction television - how can we tell when we are being fooled? This class will help students develop a critical sense that will make them more discerning viewers of non-fiction television. Using examples from classic documentaries students will learn about the history of documentary filmmaking, what makes them different from other types of films and what gives documentary films their unique voice. Using historical, controversial films, we will discuss how documentaries address the social and political issues of our time and what are some of the ethical dilemmas that face non-fiction filmmakers. At the end of this class students will be able to recognize the films that manipulate and persuade through propaganda and those that deliver a gift of truth to their viewer.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### CNMS 251 Intro to Narrative Cinema 3 cr.

This course explores the art of storytelling in the history of film in American cinema. Starting with The Great Train Robbery in 1903 on up to current cinema, the course will show a variety of landmark films by American directors. PowerPoint presentations will provide a context for the films viewed. Discussions and reading will center on how a story is told in film by bringing together story, character, visual design and music to create the magic of movies. The competing forces of the director's desire to create art and the pressures of commercial success at the box office will be analyzed.

Prerequisite(s): CNMS program acceptance

Corequisite(s): none

#### CNMS 255 Multimedia Programming Basics 3 cr.

This course introduces students to multimedia programming using popular interactive software. Programming concepts such as variables, looping, conditional statements and arrays will be covered. Students will develop several projects including simple games and database search engines.

Prerequisite(s): CNMS-225 Corequisite(s): none

#### CNMS 260: Advanced Digital Design

3 cr.

Course Description: Advanced Digital Layout and Design focuses on two areas of development for students: the application of the principles and elements of design and advanced technical skills in using Adobe InDesign CS4, the leading graphic design software used in the industry today. The course consists of 3 in class hours per week of refining technical skills and two hours per week applying theory through critiques, guest lectures, slide demonstrations and business and/or museum visits. Students will complete the class with a number of portfolio pieces as well as training in client management.

Prerequisite(s): CNMS-135, ENG-115

Corequisite(s): none

#### CNMS 265 Advanced Website Architecture 3 cr.

This is a second level course that extends the media skills covered in the first year's curriculum within a team environment. Designed to emulate a commercial website project, teams of students will be presented with a client concept and develop various components of the production. Students will learn to organize flowcharts, budgets and workflow data as well as produce web content within the scope of their project. Students are expected to have experience in web content development including HTML, digital imaging and Shockwave applications.

Prerequisite(s): CNMS-110, CNMS-165

Corequisite(s): none

#### CNMS 270 Advanced Video on Location 3 cr.

This course is an introduction to portable video production techniques, and involves extensive work with portable video gear and related lighting/sound equipment in typical field settings Material shot in this class will be integrated into the editing class in an attempt to give the student a realistic learning experience. The course will take a hands-on, project approach to learning the techniques of producing video material outside of the studio setting.

Prerequisite(s): CNMS-230 Corequisite(s): none

#### CNMS 275 Dreamweaver, SQL & PHP 3 cr.

This second level course introduces students to web application servers and their integration with databases. An introduction into relational databases will be explored as well as an explanation of basic SQL language and functions. An overview of server applications such as ASP, PHP and Perl will be presented. Students will cover a variety of topics including connecting to data sources, retrieving and inserting data, designing dynamic tables from a data

source, password & security issues, database search forms and e-commerce applications. Students are expected to have a thorough knowledge of HTML and experience authoring in an HTML editor.

Prerequisite(s): CNMS-165 Corequisite(s): none

# CNMS 280: Advanced Digital Illustration 3 cr.

This course is designed for the the advanced student who wishes to go beyond the basics of Adobe Illustrator in order to enhance vector artwork quality and complexity. We will focus on advanced design and illustration techniques that are applicable to the student interested in combining Adobe Illustrator with the rest of the Adobe Creative Suite. Design topics will include good and effective use of color, shape, line and type in logo, package and corporate identity design.

Prerequisite(s): CNMS-115, CNMS-180

Corequisite(s): none

## CNMS 285 Advanced Game Programming 3 cr.

Advanced Game Programming will provide students with a comprehensive overview of the programming concepts and application framework required to author an interactive computer game. Specifically, students will learn the basics of programming using C# and the .NET framework. Programming concepts will include basic data types, branching, iteration, class structures, inheritance, arrays, polymorphism and delegates. Several typical games will be explored and deconstructed to provide students with a practical blueprint of game creation.

Prerequisite(s): CNMS-225 Corequisite(s): none

#### CNMS 290 Advanced Non-Linear Editing 3 cr.

This course will take expand upon the skills learned in CNMS 240: Non-Linear Editing Essentials. Emphasis will be placed on furthering the student's FCP knowledge base, becoming familiar with the finer points of the program, such as the audio mixing tool and the color correction tool. Final Cut Pro Studio 7 will be the primary software. Students will have limited in class assignments so that they can focus on two of their own pieces to be used within their reel. As a result of this course you will be able to: Work within FCP at an accelerated pace, Color Correct videos and become a stronger editor by using the expanded features covered in class.

Prerequisite(s): CNMS-240 Corequisite(s): none

3 cr.

CONS 125 Framing Methods

5.0 cr.

Students who apply for the Senior Capstone Project will present proposals prior to the start of the semester outlining a project to be completed in their final semester as a capstone to their study in the program. An application is available through their faculty advisor. Students may work alone or in small groups. Students may also integrate an internship into their capstone project. Students must complete the capstone application, receive approval from the department faculty and be maintaining a 3.0 GPA. Projects shall be made available for presentation to the faculty, the department and the college. Space in

Prerequisite(s): CNMS department approval Corequisite(s): none

#### CNMS 296: Senior Portfolio

this course is limited.

3 cr.

This course covers the theory and production of an effective portfolio showcasing the specific skills of each student. A portfolio is a critical asset in the pursuit of a career or transfer to another college or university. The course will focus on the professional and aesthetics practices in the Communications and New Media Design field. It will address the art of self promotion, relevant employment and life skills necessary in finding employment in this competitive industry. Course materials will be presented through student presentations, lectures, peer and professionally reviewed critiques.

Prerequisite(s): CNMS department approval Corequisite(s): none

Construction Courses (CONS)

#### CONS 105 Tool Safety

0.5 cr.

This 12-hour course is a study of the safe operation of hand and power tools that are of required usage in the workplace

Prerequisite(s): none

Corequisite(s): CONS-115, CONS-125

#### CONS 115 Practical Building Concepts/Leveling 3.0 cr.

This course is an introduction to basic hand drafting of building components and the proper setup and use of levels, transits and lasers commonly used within the industry. Students will be introduced to reading basic house plans and drafting details from given criteria using a scale ruler. Leveling will include the proper use of builder's level, water level, laser level and transit. The course includes a variety of activities involving the use of the instruments.

Prerequisite(s): none

Corequisite(s): CONS-105, CONS-125

This course is an introduction to the framing practices commonly found in the residential construction industry today. Topics of discussion will include safe use of hand, power, and air tools, the correct layout, cutting, building, and estimating of a simple floor, wall, and roof system.

Prerequisite(s): none

Corequisite(s): CONS-105, CONS-115

## CONS 135 Adv Roof Framing & Exterior Finish 5.0 cr.

This course takes an in-depth look at advanced roof framing and exterior finishes currently practiced in residential construction. Students will calculate, layout and install hip and valley rafters. The design and installation of trusses, construction of dormers, roofs with unequal pitches, cornice design and fabrication, roof ventilation, roof flashing, and various roofing materials and their installation will also be covered. Exterior finishes include preparing exterior walls for window, door and corner trim, proper layout of a story pole for installation of siding, and installing a variety of siding types. Students will prepare, prime and paint finish coat on all trim work.

Prerequisite(s): CONS-105, CONS-115, CONS-125

Corequisite(s): CONS-145

## CONS 145 Timber Framing & Interior Covering 3.0 cr.

This course is an introduction to the study of early American house and barn framing. Using traditional joinery, the class will fabricate and erect a small timber frame building. Proper sizing of timber frame components will be discussed, along with the proper use of joinery tools, timber handling, and frame erection. Interior Coverings will address building insulation and energy efficiency, interior wall coverings and insulation.

Prerequisite(s): CONS-105, CONS-115, CONS-125

Corequisite(s): CONS-135

#### CONS 160 Intro to Leveling Instruments 1.0 cr.

This course is a study of the proper use of leveling instruments, such as, builder levels and transits, pop levels, and lasers, as they relate to laying out a building site, determining lot profiles, etc.

Prerequisite(s): none Corequisite(s): none

#### CONS 200 Kitchen Design and Millwork 4.0 cr.

This course is the study of efficient kitchen design, acquisition and installation of pre-fabricated kitchen cabinets. The course will also cover fabrication and installation of plastic laminate countertops, as well as familiarizing students with solid surface, stone and tile

countertops. Students will also create custom designed millwork projects. Estimating of all components will be covered.

Prerequisite(s): CONS-105, CONS-115, CONS-125, CONS-135, CONS-145

Corequisite(s): CONS-210, CONS-220, CONS,230

#### CONS 210 Interior Finish & Stair Construction 4.0 cr.

This course is the study of the various types of interior trim commonly used both in the residential and commercial building industry. Topics will include door installation and trim, window trim, base applications, shelving systems, and the construction of a variety of interior stairs. The proper methods of determining the appropriate-sized windows for a given building will be discussed. Estimating of all components will be covered.

Prerequisite(s): CONS-105, CONS-115, CONS-125, CONS-135, CONS-145

Corequisite(s): CONS-200, CONS-220, CONS-230

#### CONS 216 Residential Contracting 3.0 cr.

This course introduces students to the proper procedures to be used when contracting a typical residential job. Students will learn how to deal with clients, gather needed information, estimate materials, and to develop specifications and contracts.

Prerequisite(s): CONS-105, CONS-115, CONS-125, CONS-135, CONS-145

Corequisite(s): CONS-200, CONS-210 <u>or</u> CONS-220, CONS-230

#### CONS 220 Commercial Building Systems 4.0 cr.

This course is a study of various commercial building systems. Students will layout and place concrete footings, complete with anchor bolts, according to plan, after which they will construct a pre-engineered building. Students will learn proper fabrication, rigging and erection techniques. Installation of metal roofing and siding will be covered. The course includes an introduction to masonry, whereby the students will learn the history of masonry, how to mix mortar, the various patterns and bonds of masonry material, and the technique of laying brick and block. Estimating of all components will be covered.

Prerequisite(s): CONS-105, CONS-115, CONS-125, CONS-135, CONS-145

Corequisite(s): CONS-230, CONS-200, CONS-210

#### CONS 230 Concrete Construction 4.0 cr.

This course is the study of the proper design, mixing, testing and placement of concrete. Students will learn how to design concrete using a variety of admixtures to meet or exceed specific job site specifications.

Student will learn how to properly analyze aggregate and test concrete after it has been exposed to a variety of climactic conditions. Completion of the concrete testing portion of the course prepares the student to take the "Concrete Field Testing Technician Grade 1 Certification" test offered by the American Concrete Institute (ACI). The course also investigates the various types of concrete floor finishes, their of reinforcement. applications, and methods Completion of the concrete flatwork portion of the course prepares the student to take the "Concrete Flat Work Technician Certification" test, also offered by the American Concrete Institute (ACI). The design and fabrication of site-built forms, erection of patented forms, and the use of stay-in-place insulated forms will be covered. Estimating of all components will be covered.

Prerequisite(s): CONS-105, CONS-115, CONS-125,

CONS-135, CONS-145

Corequisite(s): CONS-220, CONS-200, CONS-210

# OSHA 120 Construction Safety 0.5 cr.

The OSHA 10 Hour Construction Industry Safety course is the study of safe operating procedures that are required to be performed in the construction industry. Students will be instructed how to interpret the OSHA safety standards as they pertain to daily tasks performed in the construction industry. Students will receive OSHA Construction safety cards after attending all 10 hours of classes.

Prerequisite(s): none Corequisite(s): none

## OSHA 130 Construction Safety - 30 hour 2.0 cr.

The OSHA 30 Hour Construction Industry Outreach Training course is a comprehensive safety program designed for anyone involved in the construction industry. The program provides complete information on OSHA compliance issues. OSHA recommends Outreach Training Programs as an orientation to occupational safety and health for workers covered by OSHA 29 CFR 1926. Construction workers must receive additional training, when required by OSHA standards, on specific hazards of the job. Students will learn the essentials for construction safety.

Prerequisite(s): none Corequisite(s): none

Culinary Arts Courses (CULA)

## CULA 100 Introduction to Culinary Arts 3 cr.

This course is designed to introduce students to the history, culture, philosophy, structure, organization and opportunities in the hospitality field, especially as they relate to food service Also included in this course

is the ServSafe program in food safety, culminating in the National Certification Exam.

Prerequisite(s): none Corequisite(s): none

#### CULA 110 Culinary Skills

4 cr.

4 cr.

This course includes the theory and practical application of kitchen orientation, knife skills, proper cutting techniques, breakfast cookery, salad preparation, vegetable cookery, potato, pasta and rice cookery, and soups and sandwich preparation The course also includes proper presentation and service of those items. Instruction includes lectures, demonstrations, films, class discussions and lab preparations. Students are required to be in uniform and to have culinary tool kit with them at every class.

Prerequisite(s): none Corequisite(s): none

#### CULA 120 Basic Food Preparation 4 cr.

This course teaches the basic preparation and cooking methods of meat, fish and poultry and the preparation of sauces and stocks The preparations, services and techniques of basic cooking methods, with emphasis on kitchen sanitation and safety, are presented. Instruction includes demonstrations, lectures and films, as well as a high degree of hands-on practices. Students are required to be in uniform and to have culinary tool kit with them at every class.

Prerequisite(s): none Corequisite(s): none

#### CULA 130 Basic Baking

This course is concerned with the basic principles of mixing, scaling and baking, methods and techniques of bread, cake, frosting, cookie and pie production, and laminated dough. Written and performance exams are given to evaluate student progress. Students are required to be in uniform and to have culinary tool kit with them at every class.

Prerequisite(s): none Corequisite(s): none

#### CULA 140 Food and Beverage Purchasing 4 cr.

This course is designed to teach the proper procedures for receiving, ordering through computerized and conventional methods, inventory control and storage of all restaurant/hotel products (including cleaning, ware, and linens). Emphasis will be placed on establishing specifications, determining food cost, comparative shopping, and ordering with a computer and conventional methods. Additionally, Culinary Math is covered. The class also cleans and maintains all dry goods, freezer space and cold storage used to

house all items coming into the Culinary Arts Department. Students are required to be in uniform in every class.

Prerequisite(s): MATH-020 Corequisite(s): none

## CULA 200 Culinary Arts Externship 3 cr.

This course is designed to give students exposure to the hospitality industry in order that they may practice skills gained in their first year at SMCC and gain knowledge of a segment of the industry that is of particular interest to them. Students must complete a minimum of 400 hours of work experience and a portfolio documenting their experience. Students are required to be in uniform as employer requires.

Prerequisite(s): CULA department approval

Corequisite(s): none

## CULA 210 Buffet Preparation Techniques 4 cr.

This course is designed to give students a basic understanding and working knowledge of planning and preparation of buffets of all types, using many types of foreign cuisines and local specialties including charcuterie. Instruction will include actual preparation and weekly service demonstrations, lectures, and films. Students are required to be in uniform and to have culinary tool kit with them at every class.

Prerequisite(s): CULA-100, 110, 120, 130, & 140

Corequisite(s): none

#### CULA 220 Advanced Cooking Specialties 4 cr.

This is a course in a la carte preparation and service utilizing meat, fish, poultry, soups, sauces and gravies, as well as lab preparation of foods served in the CA dining room. Students are required to be in uniform and to have culinary tool kit with them at every class.

Prerequisite(s): CULA-100, 110, 120, 130, & 140

Corequisite(s): none

## CULA 230 Advanced Pastry and Baking 4 cr.

This course teaches advanced baking techniques. Course activities include production of classical types of desserts: chocolate work, use of fine liqueurs, fruits, sugar work and breads with proper presentation and service in the Culinary Arts dining room. Students are required to be in uniform and to have culinary tool kit with them at every class.

Prerequisite(s): CULA-100, 110, 120, 130, & 140

Corequisite(s): none

## CULA 240 Planning/Dining Room Service 4 cr.

This course is designed to teach Culinary Arts students proper dining room service and procedures. Emphasis will be placed on teamwork, personal appearance,

customer service skills, and the importance of the relationship between the dining room staff and the kitchen staff in a food service operation. Students are required to wear proper dining room attire in every class.

Prerequisite(s): CULA 100, 110, 120, 130, & 140 Corequisite(s): none

#### CULA 250 Food Service Management 3 cr.

This course is designed to students to the business side of the food service industry. Through the handson planning of a food service facility, students will learn the importance and intricacies of menus, business plans, equipment layout, design, and state regulations.

Prerequisite(s): CULA-100, CULA-110, CULA-120 Corequisite(s): none

Dietetic Technology Courses (DIET)

#### DIET 100 Introduction Dietetics Profession 1 cr.

This course exposes students to the meaning of professionalism, code of ethics of a profession, certification requirements within the dietetic field, governance of the dietetics field and the relationship of dietetic technicians to the health care team. In addition, students are given opportunities to explore potential career choices.

Prerequisite(s): DIET program acceptance

Corequisite(s): none

## DIET 110 Food & Beverage Purchasing 3 c

The course is designed to inform food service professionals of the importance of proper procedures in the areas of purchasing, receiving, and storing of food and beverage inventories. Emphasis will be placed on establishing specifications and determining food cost.

Prerequisite(s): DIET program acceptance Corequisite(s): none

#### DIET 150 Principles of Food Preparation 4 cr.

This course provides an introduction to the science of food preparation with emphasis on the chemical and biological changes that occur in processing and storage of food products. Attention is given to cooking technique, material handling, heat transfer, sanitation in processing, kitchen safety, nutrient retention, product and ingredient quality characteristics, ingredient role in product structure, modification of foods to meet varied nutrient restrictions, and coordination of products to maximize palatability.

Prerequisite(s): DIET program acceptance

Corequisite(s): none

## DIET 155 Foodservice Systems Field Exp

Freshman Field Experience is conducted in the production kitchen in a health care facility. This course is a hands-on practicum which emphasizes departmental structure, product procurement, interaction with purveyors, receiving and storage, standardized recipes, menu systems, food production, use of production equipment, meal delivery, cafeteria/catering operations, and sanitation/cleaning. A minimum of 135 contact hours is required for completion of this experience.

Prerequisite(s): DIET program acceptance

Corequisite(s): none

# DIET 160 Foodservice Sanitation 1 cr.

This course is designed for degree and non-degree students interested in learning more about food safety. The course presents an overview of foodborne illness, food contamination, management of food safety, the HACCP (Hazard Analysis Critical Control Point) system and regulations that set standards of practice. Upon successful completion of an end-of-course exam, students will earn ServSafe food safety certification.

Prerequisite(s): none Corequisite(s): none

## DIET 200 Health Care Delivery Systems

This course is designed to acquaint students with all facets of health care delivery systems, including advanced level medical nutrition therapy, record communication and the systems available for delivering health care in the United States.

3 cr.

Prerequisite(s): NUTR-110, NUTR-210

Corequisite(s): none

## DIET 250 Nutrition Education and Counseling 3 cr.

In this survey course, students will learn to apply current and traditional theories of human behavior as they relate to effective change .Theorists studied include Sigmund Freud, Carl Jung, B.F. Skinner, Carl Rogers and other major behaviorists. Communication and counseling techniques, introduction to behavior modification theories, group process skills, and development of educational tools will be studied.

Prerequisite(s): ENGL-100, BUSN-255

Corequisite(s): DIET-255

#### DIET 255 Diet Seminar

This is the final course offered to graduating seniors. Students will participate in discussions relating to quality dietetic performance. Timely and controversial issues affecting nutrition professionals will be discussed.

Prerequisite(s): DIET program acceptance

Corequisite(s): DIET-250

## DIET 275 Community Field Experience 4 cr.

The Community Field Experience is conducted in a combination of outpatient based nutrition program settings and long-term care settings. This course is a hands-on practicum that emphasizes implementation of nutritional care in community and long-term care settings. Students will participate in two different community based nutrition programs selected from the WIC program, the National School Nutrition program, the Area Agency on Aging Senior Nutrition program, the Cooperative Extension, and the Portland based Project on Supported Living. Additionally, students will complete a rotation at a long-term care setting, focusing on the delivery of nutrition care and the administrative functions of a food service department. A minimum of 180 contact hours is required for completion of this rotation.

Prerequisite(s): DIET-155, NUTR-210

Corequisite(s): DIET-200

#### DIET 280 Clinical Field Experience

The Clinical Field Experience is conducted in an acute care setting. This course is a hands-on practicum that emphasizes implementation of nutritional care in acute care settings, and will be exposed to the multifaceted functions and purposes of hospitals. In addition, students will participate in one professional development activity, one continuing education activity, and one professional networking opportunity in the community. A minimum of 145 contact hours is required for completion of this rotation.

Prerequisite(s): DIET-275 Corequisite(s): none

#### NUTR 110 Normal Nutrition & Lab 4

This course is an introduction to the field of nutrition, which includes the study of carbohydrates, fats, proteins and other essential nutrients. Students will also gain a workable knowledge of digestion, absorption, and metabolism, life cycle nutrition, nutrition guidelines, and nutrition programs. The concepts covered in the lecture course are explored in greater detail during lab time using a variety of activities including food experiments, anthropometric measurement, nutrient analysis, and enhanced problem sets.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020 Corequisite(s):

# NUTR 210 Intro to Medical Nutrition Therapy 3 cr.

This course is designed to investigate the use of nutrition in the treatment of disease. Emphasis will be placed upon diets which modify for specific nutrient groups, calories, and food testures. Special needs of allergy patients, athletes, alcohol use, and fad food claims will also be explored.

Prerequisite(s): NUTR-110 Corequisite(s): none

Early Childhood Education Courses (ECED)

## ECED 100 Intro to Early Childhood Education 3 cr.

An exploration of the major historical and theoretical influences in early childhood education, which have provided the basis for current day models such as Montessori and Head Start. Discussion topics will include the dynamic roles of teacher, child and family, as well as theories relating to the overall development of the young child.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## ECED 110 Child Development 3 cr.

This course will explore the major theories of development of the young child (birth to age 8). Through observation and research, students will develop a context in which to understand the multiple variables that affect the growth and development of the young child.

Prerequisite(s): ENGL-050, ENGL0075

Corequisite(s): none

3 cr.

## ECED 150 Infant and Toddler Caregiving 3 cr.

This course will address methods of caring for and guiding infants and toddlers (pre-natal through 36 months) in group settings. Developmental characteristics and needs of the very young child and the child's family will be examined. The emphasis is on developing competent caregiving skills and on providing a stimulating, developmentally appropriate environment.

Prerequisite(s): ECED-100, ECED-110

Corequisite(s): none

## ECED 160 Interactive Environments 3 cr.

Students will exploration the nature of social development in young children and how to guide that development in the early childhood classroom. Students will also plan, design and evaluate an indoor environment. Emphasis will be placed on how to incorporate developmentally appropriate guidance practices for children ages birth through age 8 into a wide variety of child care settings. This course will emphasize the relationship between guidance and the learning environment.

Prerequisite(s): ECED-100, ECED-110

Corequisite(s): none

#### ECED 175 Practicum/Seminar I

3 cr.

Students will work in an approved (licensed) setting for 70 hours under the supervision of a certified professional. Weekly seminars are planned to support and review students' experiences. Students must submit documentation relating theory to practice. Topical focus: health, safety, nutrition and the learning environment. Participants must be matriculated ECE students and obtain departmental approval.

Prerequisite(s): ECED-100, ECED-110, Department Permission

Corequisite(s): ECED-150, ECED-160

ECED 200 Children's Lit & Language Arts

This course explores the relationship between developmental characteristics of the child and the literary choices we make for them. Students will also examine the types of literature for young children (picture books, fiction, non-fiction, poetry, etc.), various story telling techniques, how environments

can enhance emerging literacy and how literature

relates to curriculum development.

Prerequisite(s): ECED-160 Corequisite(s): none

## ECED 210 Early Childhood Special Needs 3 cr.

This course gives students a general understanding of the special education process and procedures at the early childhood level, birth through age 8. Course content enables students to enter practice with a clear set of guidelines for intervention strategies with children and support for families.

Prerequisite(s): ECED-150, ECED-160

Corequisite(s): none

## ECED 220 Observation and Record Keeping 3 cr.

In this course, students will examine the importance of and various methods of observation as a crucial aspect of the teacher's role in the early childhood classroom. The role of observation in assessing students and planning appropriate curriculum will be addressed. Students will make numerous formal observations (covering all the developmental domains) of one typically developing child. Together these formal observations along with photos, audiotapes, drawings as well as activity plans will comprise a case study to be submitted at the end of the course.

Prerequisite(s): ECED-160 Corequisite(s): none

#### ECED 225 Practicum/Seminar II

4 cr.

Students will work in an approved (licensed) setting for 112 hours under the supervision of a certified professional. Weekly seminars are planned to support and review students' experiences. Topical focus:

Motor skills, cognition, creative skills, self-concept and emotional growth and development. Students submit documentation relating theory to practice.

Prerequisite(s): ECED-175 and Department approval Corequisite(s): none

## ECED 250 The Developing Curriculum 3 cr.

This course is an exploration of a curriculum framework that sets forth a philosophy of early education. This framework includes learning goals and objectives for young children, as well as developing guidelines for teaching, which address all aspects of the child's development.

Prerequisite(s): ECED-200, ECED-210, ECED-220

Corequisite(s): none

#### ECED 260 Early Childhood Program Admin 3 cr.

This course is an overview of early childhood professions and the components necessary to start and operate a quality center-based program, with applicability to family child care homes. The specific topics will include budgets, needs assessments, staffing and program evaluations.

Prerequisite(s): ECED-160 and Department approval

Corequisite(s): none

## ECED 270 School, Home, & Community Relations 3 cr.

This course is an exploration of relationships found among children, their families and the community. By examing the changing family structure and the various roles and interactions of family members, we will address issues relevant to young children as they socialize at home and in the community. Special consideration will be given to the factors affecting family life (such as urban/rural living, socio-cultural, racial and economic realities), and the changing role of families in society today.

Prerequisite(s): none Corequisite(s): none

#### ECED 275 Practicum/Seminar III 6 cr.

Students will work in an approved (licensed) setting for 208 hours under the supervision of a certified professional. Weekly seminars are planned to support and review students' experience. Students must submit documentation relating theory to practice in the following functional areas: promoting social skills, providing guidance, family involvement, program management and promoting professionalism.

Prerequisite(s): ECED-225 Corequisite(s): none

#### ECON 120 Microeconomics

This course is an introduction to the analysis of firms and consumers in a market economy: the functioning of prices, economic decision-making by procedures and consumers, and market structure. Topics discussed include consumer producers and consumer behavior, production choices and production costs, industry structure and resource pricing.

Prerequisite(s): MATH-050 Corequisite(s): none

#### **ECON 125** Macroeconomics

3 cr. This course is an introduction to the modern economy both at the national and international levels. Topics include production of goods and services, consumption, employment, inflation, government fiscal and monetary policy, and causes of economic growth or decline. A special feature of this course is that students will manage their own hypothetical investment portfolio during the semester.

Prerequisite(s): MATH-050 Corequisite(s): none

Education Courses (EDUC)

#### **EDUC 100** Introduction to Teaching 3 cr.

Building on the research about how human beings learn, this course will expose students to the parallels between human cognition and teaching for learning with deep levels of understanding. Students will be exposed to the many facets of teaching, from a successful classroom environment, to the changing roles of teachers in the information age, to the impact and challenges of learner diversity, and the issues involved in school reform. The course format will emphasize group work and thinking as well as individual critical reflection on topics throughout.

Prerequisite(s): MATH-050 Corequisite(s): ENGL-100

#### EDUC 200 Issues in American Education

This course will introduce students to the major issues and challenges surrounding education and schooling in the United States Students will study the purposes of schooling, the trends in education, and strategies that have been used to address emerging problems/needs. The course will also cover role and impact of communities, educational bureaucracies, government (local, state, and federal), and other factors on education and education systems.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

EDUC 220 Found. Literacy Development

Learning to Read and Reading to Learn. It is often assumed that learning how to read is a basic developmental milestone, just like learning how to walk and talk. Educators understand that learning how to read is a both a dynamic and complex intellectual process. This course explores the research on language acquisition and development in children as a way to better understand how students begin to acquire and progress through requisite skills to produce both confident and competent readers. Group work, group inquiry, and field work in classrooms are integral parts of this course.

Prerequisite(s): ENGL-100 Corequisite(s): none

3 cr.

Electrical Courses (ELEC)

## ELEC 100 Basic Electrical Principles - HVAC

This course is a fundamental approach to the study of basic electrical principles, such as: safety, static and current electricity, Ohm's Law, series and parallel circuits; Kirschhoff's Laws, magnetism and its applications, chemical and heating effects, electromagnetic induction, alternating current, and measuring instruments. Classroom demonstrations with student participation are included.

Prerequisite(s): HVAC program acceptance

Corequisite(s): none

#### ELEC 103 Basic Electronics for HVAC 3 cr.

This course is a study of system controls as applied to large gas and oil fired appliances. The course covers the systems controls utilized to maintain safe and reliable automatic operation of heat and steam generators.

Prerequisite(s): ELEC-100, HVAC-115

Corequisite(s): HVAC-215

## ELEC 105 Basic Electricity I

3 cr.

This course is one of two foundational courses in the study of electricity. It examines direct current (DC) circuits, voltage, current, resistance and power. Students will learn to build, test and troubleshoot different types of circuits (series, parallel and seriesparrallel). A grade of C or better is required to move onto the next electrical course (ELEC-115).

Prerequisite(s): MATH-050 Corequisite(s): none

#### **ELEC 110 DC Circuits**

3 cr.

This is one of two foundational courses in the study of electricity. It examines the principles of electricity (voltage, current, resistance, power) and the electric circuit. Common circuits (series, parallel, seriesparallel) are examined as well as circuit theorems including Superposition, Thevenin's Theorem and Maximum Power Transfer. Troubleshooting skills are emphasized.

Prerequisite(s): ELEC program acceptance Corequisite(s): MATH-140 or MATH-145

#### ELEC 115 Basic Electricity II

Basic Electricity II is the 2nd of the two foundational courses in electricity. Students will examine the principles of alternating current (AC) electricity including peak and RMS voltages, frequency, power factor and the impact of inductors and capacitors placed in AC circuits. Series and parallel RL, RC and RLC circuits will be examined. A grade of C or better is required to move on to subsequent electrical courses.

Prerequisite(s): ELEC-105 w/grade of C or better Corequisite(s): MATH-145

#### **ELEC 120** Digital Electronics

3 cr.

Digital electronics is the study of the logic circuits and components that control devices from cell phones and DVD players to computers and industrial control Numbering systems (binary, hexidecimal) will be examined . The student will study and connect all basic gates, combination circuits, arithmetic circuits, counters, flip flops and registers.

Prerequisite(s): ELEC-110 w/grade of C or better Corequisite(s): none

#### **ELEC 130** Programmable Logic Controllers 3 cr.

This course covers the use of programmable logic controllers (PLC's) in the field of automation and process control. By using the PLC, a computer interface to connected Inputs/Outputs (I/O), and software tools, the technician can control and troubleshoot the most sophisticated systems. Students will work with two PLC platforms. Using simulation software will provide exposure to the Allen Bradley SLC500 platform. The GE Fanuc VersaMax platform will be examined with a lab fully equipped with hardware and software.

Prerequisite(s): ELEC-120 Corequisite(s): none

## ELEC 140 AC Circuits

This course is a study of alternating circuits including magnetism, electromagnetic induction, AC current and voltage, AC circuits, basic inductance, capacitance, and RC and L/R time constants, complex numbers, phasor diagrams, AC RLC circuit analysis, power factor and power factor correction, resonance and filters.

Prerequisite(s): ELEC-110 w/grade of C or better Corequisite(s): MATH-145 or MATH-160

#### **ELEC 150** Transformers

2 cr.

This course covers the theory associated with Polyphase Circuits and the comparison between single-phase and polyphase power generation; balanced and unbalanced 'wye' and 'delta' circuits; use of various wattmeters in various configurations; power factor and power factor correction techniques; single and three phase transformers; percent voltage regulation; transformer impedances.

Prerequisite(s): ELEC-115 w/grade of C or better Corequisite(s): none

#### ELEC 160 Controls I

3 cr.

Controls I introduces students to the residential wiring materials and techniques. Electrical wire, cable, devices and other materials are examined. In addition, wiring schematics utilizing device symbols will be reviewed. The National Electrical Code will be referenced to ensure safe electrical installations in the lab.

Prerequisite(s): ELEC-105 w/grade of C or better Corequisite(s): none

#### **ELEC 170** Three-Phase Circuits

3 cr.

This course covers the theory associated with Polyphase Circuits and the comparison between single-phase and polyphase power generation; balanced and unbalanced 'wye' and 'delta' circuits; use of various wattmeters in various configurations; power factor and power factor correction techniques; singleand three-phase transformers; autotransformers; 'vee' to 'vee'; scott tap percent voltage regulation; transformer impedances.

Prerequisite(s): ELEC-140 w/grade of C or better Corequisite(s): none

#### **ELEC 175** Wiring Practices

3 cr.

This course is designed to cover the principles and materials used in residential and some commercial electrical wiring applications. It will focus on devices, materials, and circuitry as they relate to residential and light commercial wiring techniques. Reference to the appropriate articles of the latest edition of the National Electrical Code will be an ongoing part of the course.

Prerequisite(s): ELEC-140 w/grade of C or better Corequisite(s): none

#### ELEC 205 Basic Electronics I

3 cr.

This course examines the construction, operation and application of discrete electronic components including diodes, bipolar and field effect device characteristics, thyristors and operational amplifiers.

Prerequisite(s): ELEC-115 w/grade of C or better Corequisite(s): none

#### **ELEC 210** Electrical Topics

3 cr.

This course will be used to explore important and timely topics in the electrical field. Examples ofthe topics that might be examined would include: cabling and connectors for data and voice communications (networking installations), lighting options (the application and installation of incandescent, florescent, and HID lighting).

Prerequisite(s): ELEC-115 w/grade of C or better Corequisite(s): none

#### **ELEC 215** Electrical Machinery

3 cr.

This course will examine DC and AC generators and motors. Calculations and measurements of current, speed, and torque will be taken on motors. Percent voltage regulation and efficiencies will be taken on generators. Lab experiments will be used to better understand the theory behind electrical machines.

Prerequisite(s): ELEC-170 Corequisite(s): none

#### **ELEC 220 Electric Motors**

2 cr.

This course will cover DC and AC generators and motors. The student will examine DC shunt, series and compound machines, single and three phase induction motors and three phase alternators in the class and

Prerequisite(s): ELEC-150 Corequisite(s): none

#### **ELEC 230 Industrial Electronics**

3 cr.

This course covers discrete and integrated circuit devices including capacitors, diodes, bipolar junction transistors, field effect transistors, SCR's, triacs, and operational amplifiers. Troubleshooting skills will be emphasized.

Prerequisite(s): ELEC-140 w/grade of C or better

Corequisite(s): none

#### **ELEC 240 Fluid Power Systems** 3 cr.

This course is an overview of basic components, applications, and circuitry involved in hydraulics and pneumatics. Lecture and lab experiments involve design, purpose, construction, and the basic maintenance of fluid power devices and systems.

Prerequisite(s): ELEC-130 or permission

Corequisite(s): none

#### **ELEC 250** National Electrical Code

This course will examine the rules, regulations and requirements of the current version of the National Electrical Code for safe electrical installations. Examples, calculations and graphics will be used to

explain requirements to better prepare students to take the State exam.

Prerequisite(s): ELEC-215 or permission

Corequisite(s): none

#### **ELEC 255** Electrical Blueprint Reading 3 cr.

This course is designed to cover the fundamentals of blue print reading and specification reading skills. Focus will be on developing efficient and accurate print reading skills in the areas of electrical construction and maintenance. Specifications are presented and reinforced through actual print reading exercises offering practice in interpretation and analysis in various prints in the residential, commerical, and industrial fields.

Prerequisite(s): ELEC-115 w/grade of C or better Corequisite(s): none

#### ELEC 260 Motor Controls and Automation

This course covers the theory, study, and application of electro-mechanical devices; ladder logic diagrams; control wiring techniques; electronic motor starters and circuits; proximity and photoelectric sensors; variable frequency drives.

Prerequisite(s): ELEC-215 Corequisite(s): none

## **ELEC 265** Renewable Energy Resources

This course is designed to cover the principles of electricity generation using wind, solar, hydro, and biomass alternative energy sources. Emphasis will be on characteristics, design, and implementation of direct and electromechanical energy conversion; types of storage devices; large-scale applications; and power system issues associated with integration of these technologies.

Prerequisite(s): ELEC-140 w/grade of C or better or

permission

Corequisite(s): none

#### ELEC 270 Electrical Communication Systems 1 cr.

This course covers the principles and application of the latest security, protective, and data communications systems for residential and commercial buildings. Focus will be on the concepts and practices of security and information transmission through various communication media, such as radio, television, telephone networks, data communications, satellites, and optical fiber.

Prerequisite(s): ELEC-175 or permission

Corequisite(s): none

#### **ELEC 275** Selected Electrical Topics

1 cr.

Selected Electrical Topics is used to examine new, hottopic devices and/or technology in the electrical field or to examine important topics that were not covered in previous classes such as the selection of circuit breakers or fuses for overcurrent prot.

Prerequisite(s): ELEC-260 or permission

Corequisite(s): none

#### ELEC 280 Controls II

2 cr.

The theory and application of electro-mechanical devices using relays and switches, the study of ladder logic diagrams, the theory and application of motor starter circuits, sensor technology and reduced voltage starting systems.

Prerequisite(s): ELEC-150 Corequisite(s): none

Emergency Medical Services / Paramedicine Courses (EMSP)

EMSP 101 Introduction to Paramedicine 3 cr. This is an introduction to the Paramedic program. Included in this course are the roles and responsibilities of a paramedic, an overview of EMS systems, the medical-legal implications of providing emergency care, EMS communications including documentation, and medical terminology. Classes also personal well-being. fitness. cover communication, incident management, and current EMS research topics. Entrance into this course requires that students are Basic Emergency Medical Technicians.

Prerequisite(s): EMSP program acceptance

Corequisite(s): none

#### EMSP 110 Paramedic Procedures I

3 cr.

This course will develop the skills needed to perform a patient assessment including scene safety, history taking, techniques of physical exam, documentation, and the recognition and treatment of life threatening conditions. A review of the respiratory system and respiratory management are covered in this course.

Prerequisite(s): EMSP program acceptance

Corequisite(s): none

## EMSP 150 Cardiology I

3 cr

This course is designed to provide paramedic students with an understanding of the cardiovascular system including conduction system of the heart, electrocardiography, 12 lead ECG's, and beginning treatment of a patient with chest pain. Students will demonstrate use of ECG monitor/defibrillator including defibrillation, non-invasive pacing, and cardioversion. Topics include a review of the anatomy

and physiology of the heart and circulatory system, electrophysiology, and assessment of the cardiac patient.

Prerequisite(s): EMSP-110 Corequisite(s): none

### EMSP 155 Pharmacology

3 cr.

This course is designed to provide students with a broad knowledge base of drug therapy. Emphasis is placed on preparing students to safely administer medications to patients (in other clinical courses). Basic pharmacological concepts provide students with essential information related to principles of pharmacology, clinical applications, and biopsychosocial aspects. Lifespan considerations are included within the essential information. Students also focus on major drug categories and a review of body systems. There is not a clinical component for this course.

Prerequisite(s): BIOL-130, BIOL-131

Corequisite(s): none

# EMSP 160 Paramedic Procedures II

3 cr.

1 cr.

This course will continue the skills needed to perform a patient assessment and the recognition and treatment of life-threatening conditions. Intravenous therapy, advanced airway management, needle and surgical cricothyrotomy, chest decompression, interosseous infusions and medication administration are some of the procedures that will be presented.

Prerequisite(s): EMSP-110 Corequisite(s): EMSP-161

## EMSP 161 Paramedic Procedures II Lab

This course taken concurrently with EMSP-160 will provide students with the opportunity to synthesize cognitive and psychomotor skills in the laboratory setting. Students will be expected to successfully complete a comprehensive adult and pediatric assessment, basic and advanced airway skills, intravenous therapy, and medication administration. The general format of the course will follow that of the

Prerequisite(s): none Corequisite(s): EMSP-160

lecture.

#### EMSP 200 Clinical Practicum I

3 cr.

Paramedic students will be scheduled for 200 hours of clinical experience in their first clinical practicum. Students will begin to integrate didactic knowledge with clinical education under the supervision of a preceptor. Students will complete clinical rotations in a variety of medical related facilities to include emergency divisions, clinics, critical care units,

respiratory therapy, surgical units, and EMS services. Students will be required to document all clinical time and complete a minimum number of patient assessments, intubations, medication administration, and IV cannulations.

Prerequisite(s): BIOL-135, BIOL-136, EMSP-101, EMSP-150, EMSP-155, EMSP-160, EMSP-161

Corequisite(s): none

#### EMSP 205 Trauma Management

4 cr.

This class will consist of the pathophysiology and management of trauma patients to include, but not limited to: mechanism of injury, assessment of the trauma patient, management of head injuries, chest injuries, abdominal injuries, spinal injuries, orthopedic and pediatric injuries, management of the multitrauma patient, management of special airway problems, and current trends in trauma management.

Prerequisite(s): BIOL-135, BIOL-136, EMSP-101, EMSP-150, EMSP-155, EMSP-160, EMSP-161

Corequisite(s): none

#### EMSP 210 Medical Emergencies I

4 cr.

3 cr.

This class will consist of lecture as well as hands-on practice in the classroom. After reaching competency in patient assessment skills, students will concentrate on airway and ventilation, respiratory disorders, nervous system disorders, endocrinology, anaphylaxis, gastroenterology, renal failure and hematology.

Prerequisite(s): BIOL-135, BIOL-136, EMSP-101, EMSP-

150, EMSP-155, EMSP-160, EMSP-161

Corequisite(s): none

#### EMSP 215 Pediatric Emergencies

This course will allow students to integrate pathophysiological principles and assessment findings to formulate a field impression, and to implement a treatment plan of the pediatric and neonatal patient. Topics will include assessment and management for respiratory, cardiac, trauma, neurological, obstetrical and gynecological emergencies.

Prerequisite(s): BIOL-135, BIOL-136, EMSP-101, EMSP-

150, EMSP-155, EMSP-160, EMSP-161

Corequisite(s): none

#### EMSP 220 Advanced Cardiology

3 cr

This course provides an in-depth study into the pathophysiology and management of cardiovascular disease and related emergencies. Topics include a review of the cardiac patient, pathophysiology of atherosclerosis, specific conditions resulting from the atherosclerotic heart disease, peripheral vascular emergencies, pharmacologic intervention,

dysrhythmia recognition, and management of cardiac emergencies.

Prerequisite(s): BIOL-135, BIOL-136, EMSP-101, EMSP-

150, EMSP-155, EMSP-160, EMSP-161

Corequisite(s): none

# EMSP 225 Medical Emergencies II 4 cr.

This class consists of lectures as well as hands-on skills in the classroom. After reaching competency in patient assessment skills, students will concentrate on environmental emergencies, behavioral and psychiatric disorders, toxicology, infectious diseases, geriatric emergencies, patients with special challenges, and acute interventions for chronic care patients.

Prerequisite(s): BIOL-135, BIOL-136, EMSP-101, EMSP-

3 cr.

150, EMSP-155, EMSP-160, EMSP-161

Corequisite(s): none

## EMSP 250 Clinical Practicum II

Paramedic students will be scheduled for 200 hours of clinical experience in their second clinical practicum. Students will continue to gain clinical experience integrating cognitive and psychomotor skills under the supervision of a preceptor. Students will complete clinical rotations in a variety of medical related facilities to include paramedic services, emergency divisions, critical care units, anesthesia, psychiatric, pediatrics, and labor and delivery. Students will be required to document all clinical time and complete a minimum number of patient assessments, intubations, medication administration, and IV cannulations.

Prerequisite(s): EMSP-200 Corequisite(s): none

# EMSP 260 Assessment Based Management 2 cr.

This senior level course will integrate the principles of assessment-based management to perform an appropriate assessment and implement the management plan for patients with common complaints.

Prerequisite(s): EMSP-210, EMSP-215, EMSP-220,

EMSP-225

Corequisite(s): none

## EMSP 265 Rescue Operations 3 of

At the completion of this senior level class, students will be able to integrate the principles of rescue awareness and operations to safely rescue a patient from water, hazardous atmospheres, highways and hazardous terrain. Students will integrate the principles of rescue awareness and operations in formulating treatment for the patient(s).

Prerequisite(s): 30 credits toward major

Corequisite(s): none

#### EMSP 270 Clinical Practicum III

3 cr.

Paramedic students will be scheduled for a minimum of 200 hours of clinical experience in their third clinical practicum. During this clinical rotation students will encounter more technical and challenging experiences progressing into the role of teamleader under the supervision of a preceptor. Students will be required to document all clinical time and complete a minimum of patient assessments, intubations, IV cannulations, IV medication administrations.

Prerequisite(s): EMSP-250 Corequisite(s): EMSP-275

#### EMSP 275 Clinical Practicum IV

1 cr.

This final clinical for paramedic students will consist of a minimum 90-hour internship in a high volume EMS service. Students will be expected to function as an entry-level paramedic during their ALS field internship under the direct supervision of a paramedic preceptor.

Prerequisite(s): EMSP-250 Corequisite(s): EMSP-270

#### FMSP 280 Paramedic Boards Review

1 cr.

This 24-hour course taken in the final semester will review major topics and prepare senior paramedic students for the National Registry paramedic cognitive and psychomotor exam.

Prerequisite(s): EMSP-210, EMSP-215, EMSP-220,

EMSP-225

Corequisite(s): none

Emergency Medical Technician Courses (EMST)

EMST 100 Emergency Medical Technician This course is designed to give students, through lecture, practical lab, and clinical experience, the entry-level knowledge and skills necessary to provide basic emergency medical care and transportation for patients who access the emergency medical system. Upon successful course completion, students are eligible to take the National Registry of EMT's certification examinations. Students will perform interventions necessary to provide patient care and transportation including basic level patient airway management assessment, and oxygen administration, CPR, spinal immobilization, shock management, bandaging and splinting, and medication administration. Knowledge and skills obtained at the EMT level provide the foundation for further advancement to Advanced EMT and Paramedic.

Prerequisite(s): none Corequisite(s): none

#### EMST 105 Ambulance Operations/AVOC

1 cr.

This course will identify the problems facing ambulance vehicle operators, review the legal responsibilities of emergency vehicle operations, discuss the appropriate use of signaling devices and emergency responses, and provide the opportunity to perform hands-on operation through the driving course.

Prerequisite(s): current, valid drivers license Corequisite(s): none

English Courses (ENGL)

## ENGL 050 College Reading

3 cr.

3 cr.

This course is designed to teach the reading and study skills essential to succeed in college. It focuses on the understanding and retention of textbook comprehension skills and on advancing vocabulary and reading fluency skills. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): Appropriate placement

Corequisite(s): none

## ENGL 075 Basic Writing

This course will include an emphasis on learning to write grammatically correct English sentences and gaining a mastery of the basics of punctuation. It will also seek to remedy common errors of syntax and vocabulary use. Concurrent with such instruction will be lessons on writing formal essays. The essay process will include re-writing, revision and proofreading. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): Appropriate placement

Corequisite(s): none

#### ENGL 100 English Composition 3 cr.

English Composition is the introduction to college writing across the curriculum. It will introduce students to the standard rhetorical modes which will be assigned in this course but will also be assigned in other courses in other disciplines. An emphasis will be placed upon writing as a process of creating first drafts then revising, rewriting and proofreading them for accuracy, clarity and succinctness of written expression. The course will explore the distinctions between spoken and written, formal and informal uses of language. The course will also provide an introduction to research and the task of producing a formal research paper that follows MLA style and documentation practices.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### **ENGL 110 Oral Communications**

3 cr.

This course in public speaking includes organization of speech materials, practice of oral reading, participation in panel discussions, and presentations of informal talks and formal speeches. Self-evaluation and growth are encouraged through the use of videotaping.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### ENGL 115 Introduction to Literature 3 cr.

This course introduces the student to the literary genres: poetry, drama, fiction and non-fiction It emphasizes literature as a reflection of culture. This includes the discussion of literary terms, close textual reading, and historical backgrounds. This course has been designated as a writing-intensive course.

Prerequisite(s): ENGL-100 Corequisite(s): none

#### ENGL 200 Creative Writing 3 cr

This course, which is a writing workshop, will welcome all four of the major literary genres: fiction, poetry, drama, and the personal essay. Most of class time will be spent discussing student manuscripts; the remaining time will consist of lectures on craft, critical discussion of assigned readings, and writing exercises. While a book will be assigned, student's original writing is the primary "text" which will be submitted to the class in regular rotation so that all have equal air time.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

## ENGL 225 Writing Tutors 3 cr.

This course prepares skilled writing students to work as peer tutors in the college's Learning Assistance Center. It provides advanced instruction in grammar and composition, with special emphasis on the writing process. Through the weekly seminar and tutoring sessions, students develop teaching strategies, problem-solving skills, and greater understanding of composition theory and practice.

Prerequisite(s): ENGL-100 Corequisite(s): none

Environmental Science Courses (ENVR)

#### ENVR 110 Fund. Environmental Science 4 cr

This survey course is designed to provide students with a sound foundation in basic principles and unifying concepts of Environmental Science Topic selection is based on major themes of modern environmental sciences: humans and sustainability; science and ecological principles; sustaining

biodiversity and natural resources; and sustaining environmental quality and human societies. Students will gain an awareness of the importance of Earth's systems in sustaining our daily lives, plus the scientific foundation and tools needed to apply critical thought to contemporary environmental issues. The course is intended for both science and non-science majors.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020

Corequisite(s): none

## ENVR 115 Earth Science 4 cr.

This survey course is designed to provide students with a sound foundation in basic principles and unifying concepts of modern geology Major topics include: 1) the study of geologic processes and materials including, plate tectonics, erosion, soils, rocks and minerals; 2) geologic hazards such as floods, landslides, volcanoes and earthquakes; 3) geologic resources such as water, fossil fuels, and metals; and 4) environmental challenges such as water supply, waste management, depleting energy and mineral resources, and global change. We will study these topics from a global perspective, paying particular attention to their importance in Maine and New England. Weekly laboratories will compliment lecture topics and will include field trips, mapping exercises, internet exercises, guest speakers, and laboratory analysis of earth materials.

Prerequisite(s): none Corequisite(s): none

## ENVR 120 Environmental Geology 4 cr.

Environmental Geology is a course developed to investigate how Geology determines the success and failure of living systems across our globe. Topics covering volcanism, earthquakes erosion, pollution and their effect on Biological systems will be explored. Additionally, basic geological principles that have formed and continue to change our world will be discussed.

Prerequisite(s): none Corequisite(s): none

English for Speakers of Other Languages Courses (ESOL)

## ESOL 065 Intermediate Speak/Listen 3 cr.

This high-intermediate course focuses on the speaking and listening and note-taking skills that are necessary in an academic setting Students will discuss academic reading materials in small groups and begin to develop a method for delivering an oral presentation to a large group. Students will continue to develop a system for academic note-taking and learn how to use their notes to answer comprehension questions and summarize lectures. This course must be completed with a C or

better to enroll in ESOL-085. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): ESOL placement test

Corequisite(s): none

#### ESOL 070 Intermediate Reading 3 cr.

This high-intermediate course focuses on reading skills and vocabulary development Students will be asked to demonstrate an understanding of reading materials with comprehension questions and writing assignments. Grammar is taught in the context of reading materials and in student generated writing. This course must be completed with a C or better to enroll in ESOL-090. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): ESOL placement test

Corequisite(s): none

#### ESOL 075 Intermediate Writing 3 cr.

This high-intermediate course focuses on reading skills and vocabulary development Students will be asked to demonstrate an understanding of reading materials with comprehension questions and writing assignments. Grammar is taught in the context of reading materials and in student generated writing. This course must be completed with a C grade or better in order to take ESOL-095. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): ESOL placement test

Corequisite(s): none

#### ESOL 085 Advanced Speaking & Listening 3 cr.

This advanced course focuses on the speaking skills and listening and note-taking skills that are necessary in an academic setting Students will discuss academic reading materials in small groups. Students will develop a method for delivering an oral presentation to a large group and increase self-confidence. Students will develop a system for academic note-taking and learn how to use their notes to answer comprehension questions and summarize lectures. Students will listen to academic lectures, take notes, and learn how to write essays assimilating the information presented in the class lectures and readings, with their own opinions. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): ESOL placement test

Corequisite(s): none

#### ESOL 090 Advanced Reading 3 cr.

This advanced course focuses on critical and analytical reading skills and vocabulary development that are necessary for content courses Students will be asked to demonstrate an understanding of reading materials with a variety of comprehension exercises and writing

assignments. Grammar is taught in the context of the readings and student generated writing. This course must be completed with a C grade or better in order to take college level courses. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): ESOL placement test

Corequisite(s): none

## ESOL 095 Advanced Writing 3 cr.

This advanced course focuses on academic writing skills necessary for content courses Students will continue to develop their abilities with sentence structure, paragraph writing, and essays from personal experience and readings. Students will learn to cite sources and answer essay questions from readings. Grammar is taught in the context of the readings and student generated writing. This course must be completed with a C grade or better in order to take college level courses. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): ESOL placement test

Corequisite(s): none

Fire Science Technology Courses (FIRE)

## FIRE 105 Introduction to Fire Protection 3 cr.

This course is designed to be the initial course of the Fire Science Technology program. It is recommended for students new to the fire service. The course is a survey of the fire protection field, with emphasis on developing an awareness of history, organization, career options, and study skills.

Prerequisite(s): none Corequisite(s): none

#### FIRE 110 Fire Protection Systems 3 cr.

This course is an introduction to fire protection and detection systems and their role in community fire protection. The focus of this course is on understanding fire behavior and the basic components that make up fire protection systems. Topics covered in this class include: Fire behavior, portable fire extinguishers, fire alarm and detection systems, standpipe systems, commercial/industrial automatic sprinkler systems, residential sprinkler systems, special extinguishing systems, and community fire protection.

Prerequisite(s): none Corequisite(s): none

#### FIRE 115 Fire Service Building Construction 3 cr.

This course is designed to be a comprehensive study of building materials, methods and design as they are related to fire protection and suppression. Topics covered in this class include: building materials and their impact on the fire service, types of construction, methods of construction, fire protection features, building codes, an examination of fire's effect on buildings and evaluation of fire damage. Many case studies are used during the delivery of this course to illustrate the importance of understanding building construction. This course concludes with presentations of semester long student projects.

Prerequisite(s): none Corequisite(s): none

## FIRE 125 FT Student Live-In Program 1 cr.

This course, one in a continuous series of Service Learning courses, provides the Fire Science Technology student with experiential learning opportunities in the field of fire protection. Service Learning credits are available to the student for each semester with a maximum of four credits awarded. The student will live at an area fire station and become a fully participating member of that department. The student will learn and practice job responsibilities in the functional areas of fire suppression, fire prevention, equipment maintenance, and facility maintenance. The student will keep a log of his/her activities and reflect on experiences in regular group meetings. This course is available only to full time, matriculated Fire Science Technology students participating in the Southern Maine Community College Live-In Program and may be taken up to four times for credit.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### FIRE 140 Fire in American Society 3 cr.

This course traces the challenges faced by early settlers in the New World, how they protected themselves, their homes and their property from the ravages of fire. The evolution of building construction and it's impact on how fires react, laws relating to maintaining fire as a friend and how to control it as a foe, and the equipment used to combat fires and water supply to maintain the battle will be examined in detail. Major fires in American history will be examined to determine how they changed the very fabric of the American lifestyle.

Prerequisite(s): none Corequisite(s): none

# FIRE 150 Fire Inspector

3 cr.

This course provides a demonstration of the basics of municipal fire inspection and code enforcement principles. Students will learn the basics of inspections, the identification of common hazards, the basics of special inspections, and the use of NFPA 101 Life Safety Codes and NFPA 1 Uniform Fire Code.

Prerequisite(s): none Corequisite(s): none

#### FIRE 155 Fire Service Hydraulics

3 cr.

This is a foundation course in the principles of hydraulics as applied to fire service hose and appliances. This course applies theoretical and application principles to solve hydraulics based challenges. Topics include principles involving water at rest and in motion, solving hydraulic problems in fire hose layouts by exact mathematical calculation and fire ground estimation, establishing the ability to make rapid fire ground hydraulic determinations, and to evaluate the efficiency and effectiveness of various hydraulic systems including hydrant flows.

Prerequisite(s): none Corequisite(s): MATH-140

## FIRE 160 Fire Investigation I

3 cr.

This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes.

Prerequisite(s): none Corequisite(s): none

## FIRE 165 Introduction to Wildland Fire 3 cr.

Wildfires are responsible for property damage throughout Maine and the United States every year. In addition, prescribed fire is used as land management tool to accomplish ecological objectives. This class will provide students with an introduction to wildland fire management. The class will cover topics in fire behavior, fire weather, fire ecology, and fuel management. This class will prepare an untrained wildland firefighter with the tools required to work on a wildland or prescribed fire. Students can earn National Wildland Coordinating Group (NWCG) certification for Wildland firefighter with this course and an additional eight hour field exercise.

Prerequisite(s): none Corequisite(s): none

# FIRE 170 Wildland Fire Behavior

3 cr.

Throughout history, wildland fires have shaped much of the natural landscape in New England as well as the rest of the United States. Relating fire behavior to modern landscapes will help managers make informed decisions about fuel management practices. This class will provide students with an understanding of expected fire behavior. Topics will include an in depth understanding of weather, topography, and fuels effect on wildland fire behavior. Although this class is not a firefighting class, a field component should be expected with the possibility to observe prescribed fire. It is recommended that students take

Introduction to Wildland Fire management prior to this class.

Prerequisite(s): MATH-020 Corequisite(s): none

#### FIRE 200 Hazardous Materials

3 cr.

3 cr.

Because of the ever-increasing rate at which new industrial materials are being introduced into our world, and because it is the fire-fighter or fireprotection specialist who must deal with the hazards associated with these new chemicals, this is a particularly valuable course. This course is designed to meet the NFPA 472 standard at the ""Operations"" level. Some of the areas of study include flammable materials, pressurized vessels, cryogenics, oxidizing agents, corrosives, explosive and toxic materials. Students will become familiar with tools, equipment and response techniques as well as the federal and state laws that govern the handling of hazardous materials and the incidents they create. This course concludes with presentations of semester long student projects. In conjunction with this course, there is an opportunity to participate in a field training that may result in State Hazardous Materials certification at the "Operations" level.

Prerequisite(s): 30 credits or more

Corequisite(s): none

## FIRE 205 Fire & Life Safety Educator

This course is designed to meet the requirements of the NFPA 1035, the professional qualification standards for Public Fire and Life Safety Educator I and II. The course combines student activities, instructor presentations and community-based projects to develop skills and knowledge in the field. The course will provide students with the knowledge to design a public fire and life safety program, to organize a budget to meet the needs of the program, and to present a fire safety or life safety education presentation. Students can earn state certification from successful completion of this course and community based teaching assignments.

Prerequisite(s): none Corequisite(s): none

#### FIRE 210 Fire Instructor 3 cr.

This course is designed to meet the requirements of NFPA 1041, the professional qualifications for Fire Instructor, and assist current and aspiring fire/rescue officers in teaching fire-service-oriented subjects and developing an understanding of the various methods of teaching fire/rescue occupational subjects. This course will aid students in preparing instructor lesson plans and help them to recognize and practice the effective use of other instructor resource materials.

Students can earn state and national certification from successful completion of this course and a practical teaching demonstration.

Prerequisite(s): none Corequisite(s): none

## FIRE 215 Fire Service Leadership 3 cr.

This course is designed to develop a foundation of leadership, supervision and communication skills for the fire officer. The subject matter, instruction, activities. and assignments will follow recommendations for Fire Officer I and II as presented in NFPA 1021, Standard for Fire Officer Professional Qualifications. Students will study basic issues related to all supervision, as well as issues specific to fire service supervision. Students can earn state and national Fire Officer I & II certification by successfully completing this course, additional writing assignments, and community-based training and certification requirements. This course has been designated as a writing-intensive course.

Prerequisite(s): ENGL-100 Corequisite(s): none

#### FIRE 230 Water Supply Analysis

3 cr.

Water is the most important and frequently used extinguishment medium used by the emergency fire services. The effective application of limited water resources is critical to successful control of unwanted fire. Students will gain a basic understanding of fire protection water supply systems in use in rural communities, urban communities and industrial settings. This course will require the application of hydraulic principles and pre-incident planning. Along with classroom lecture, the course will involve significant field application of classroom concepts.

Prerequisite(s): FIRE-155 Corequisite(s): none

#### FIRE 250 Fire Ground Operations

This course offers basic tactics and strategies to the firefighter. The course looks at three major response apparatus and explores the internal structure and skills

needed to operate at the scene of a fire.

Prerequisite(s): 30 credits earned

Corequisite(s): none

#### FIRE 260 Fire Administration 3 cr.

This course is a broad overview of the management practices employed in today's fire/rescue services. The course focuses on the role of the fire administrator within the context of municipal government. The course will emphasize managerial ethics, accountability, the changing environment, planning,

financial management, and preparing for the future. This course also requires development and defense of a Fire Science Thesis Portfolio documenting attainment of SMCC Fire Science learning outcomes. This course has been designated as a writing-intensive course.

Prerequisite(s): ENGL-100 Corequisite(s): none

French Courses (FREN)

#### FREN 100 Conversational French 4 cr.

This course is designed for students of all levels of French The course focuses on the students" ability to produce the language orally. Content begins with basics and becomes increasingly complex as the semester progresses. The course does not include explanations of grammar and all assessments are done orally. The course is intended for people who plan to use spoken French in some capacity in their lives.

Prerequisite(s): none Corequisite(s): none

#### FREN 101 Beginning French I 4 cr.

This beginner's course in French equally emphasizes the four skills of language learning: listening comprehension, speaking, reading and writing Interactive materials and a laboratory component create a multifaceted and challenging learning environment. This course is appropriate for students with two or fewer years of high school French.

Prerequisite(s): none Corequisite(s): none

#### FREN 102 Beginning French II 4 cr.

This course in French equally emphasizes the four skills of language learning: listening comprehension, speaking, reading and writing Interactive materials and a laboratory component create a multifaceted and challenging learning environment. This course is a continuation of FREN-101 and follows the course sequence.

Prerequisite(s): FREN-101 Corequisite(s): none

Geographic Information Systems Courses (GISS)

## GISS 150 Intro to Geographic Info Systems 3 of

This computer intensive course provides an overview of cartography, spatial data structures, sources of data used in GIS, and analysis of spatial data. Students will gain an understanding of uses and applications of GIS, as well as a working knowledge of ESRI's ArcMap software. Classes will consist of lectures and computer exercises. Recommended: Knowledge of Windows based software.

Prerequisite(s): none Corequisite(s): none

GISS 250 Geographic Info. Systems II 3 cr.

GISS-250 is an advanced class for students who have taken GISS-150 and wish to advance their skills in an applied fashion. The focus of the course is on development of individual projects. Students will define a real world problem and develop a GIS application which can be used to analyze the problem and make recommendations toward a solution. Students will prepare a report and do a public presentation of their work at the end of the course. Class sessions are used to work on software applications and to meet with individual students to discuss the progress of their projects.

Prerequisite(s): GISS-150 Corequisite(s): none

German Courses (GRMN)

## GRMN 100 German I

4 cr

This is a beginner's course in German equally emphasizing the four skills of language learning: listening comprehension, speaking, reading and writing This course is appropriate for students with no prior German knowledge.

Prerequisite(s): none Corequisite(s): none

## GRMN 200 German II 4 cr.

This is a continuation of the beginner's course in German equally emphasizing the four skills of language learning: listening comprehension, speaking, reading and writing This course is appropriate for students with little prior German knowledge.

Prerequisite(s): GRMN-100 Corequisite(s): none

Health Science Courses (HLTH)

## HLTH 155 Pharmacology 3 cr.

This course is designed to provide students with a broad knowledge base of drug therapy. Emphasis is placed on preparing students to safely administer medications to patients (in other clinical courses). Basic pharmacological concepts provide students with essential information related to principles of pharmacology, clinical applications, and biopsychosocial aspects. Lifespan considerations are included within the essential information. Students also focus on major drug categories and a review of body systems. There is not a clinical component for this course.

Prerequisite(s): BIOL-130, BIOL-131

Corequisite(s): none

HEOP 100 Construction Safety for HEOP

This course is designed to provide students with knowledge and skills as prescribed by the Occupational Safety and Health Administration This course will provide students with the ability to recognize and avoid hazardous situations as well as the ability to conduct themselves safely on the job site throughout their career. Students who successfully complete this section of the course will earn the industry-recognized credential, OSHA (10 or 30) Hour card.In addition, students enrolled in this course will study aspects of safety prescribed by the Mining Health and Safety Administration as pertinent to heavy equipment operators and laborers who will be working in and around trenches and other excavation work sites.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### HEOP 115 Maintenance and Service 3 cr.

This course is designed to provide students with fundamental knowledge and skills of the Heavy Equipment Operations / construction industry As a result of this course, students will acquire the knowledge to safely work on a heavy equipment construction site. Students will study various types and functions of heavy equipment, as well as how to perform a pre-start safety inspection. Students will learn how to properly start up and shut down the equipment as well as the purpose and use of the operational controls. Students will complete this course with an introduction to construction site layout and grades.

Prerequisite(s): HEOP-100 Corequisite(s): none

#### HEOP 130 Backhoe and Excavator (Sim Lab) 3 cr.

This course will introduce students to the basic operation of a backhoe and/or excavator to perform fundamental procedures required for operation on the job site This simulation lab will provide students with opportunity to practice basic backhoe and excavator operations repetitively. This lab will develop proficiency in preparation for an internship.

Prerequisite(s): HEOP-100 Corequisite(s): none

#### HEOP 145 Site Finishing & Grades 3 cr.

This course is designed to give students the skills to perform print reading, plotting and site preparation of ground work This course describes the use of various types of heavy equipment to finish and trim grades and slopes of roads, pads, ditches and other structures. Information is presented regarding the

responsibilities and leadership abilities in relation to organizing and directing workers and operations. Students will understand and interpret production requirements and specifications used for grade layout.

Prerequisite(s): HEOP-100 Corequisite(s): none

#### HEOP 160 Bulldozer and Excavator (Sim Lab) 3 cr.

This course will introduce students to the basic operations of a bulldozer and an excavator to perform fundamental procedures required for operation of each piece of equipment on the job site. This lab will provide students with the opportunity to practice basic skills on a job site associated with the equipment operations repetitively. This lab will develop proficiency in preparation for an internship.

Prerequisite(s): HEOP-115 Corequisite(s): none

#### HEOP 175 Heavy Equipment Internship 4 cr.

The Heavy Equipment Operations Internship comprises on-the-job training provided by employers on actual construction sites A training agreement specifies the tasks the student will be expected to perform. The instructor will determine the number of hours a student will participate in the internship.

Prerequisite(s): HEOP-130, HEOP-145, HEOP-160

Corequisite(s): none

History Courses (HIST)

#### HIST 120 World History to 1500 3 cr.

This is an introductory survey covering the history of the global past from the origins of humanity through the 15th century, from the rise of early civilizations through the moment of European contact in the western hemisphere during the late-15th century. This course will introduce students to the process of thinking historically: students will seek to understand the problems, events, and people of the global past under their own terms and in the broadest contexts. Historians wage vigorous debates over such questions as: How did human society first evolve? What constitutes "civilization"? How has religion changed over time? What has been the significance of cultural exchange between peoples? Students will become attuned to how different the past was to our own lifetimes, being ever mindful of how even ancient world history has and continues to shape our present.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## HIST 125 World History Since 1500 3 cr.

This is an introductory survey covering the history of the global past from the 15th century through contemporary times, from the moment of European contact in the western hemisphere during the late-15th century through the modern global context. This course will introduce the process of thinking historically: students will seek to understand the problems, events, and people of the global past under their own terms and in the broadest contexts. Students will examine important historical issues such as: How did the modern world evolve? How have institutions such as slavery, religion and capitalism shaped the global experience? What caused nations to emerge and how does nationalism affect individuals? Students will develop an appreciation of how our contemporary world emerged from and is shaped by these critical issues.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## HIST 130 United States History to 1877 3 cr.

This is an introductory survey covering the history of the United States through Reconstruction. This course is designed to acquaint students with most major topics in the American experience ranging from the origins of British settlement in North America through the civil war and the end of reconstruction in 1877. This course will explore the cultures that discovered and created American society and the interactions of European, Native American and African peoples. It also will introduce students to the process of thinking historically, with a focus on original historical sources.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### HIST 135 United States History Since 1877 3 cr.

This is an introductory survey covering the history of the United States since the end of Reconstruction. This course is designed to acquaint students with most major topics in the American experience ranging from the aftermath of the Civil War through the contemporary period. Some of the key topics to be covered include: industrialization, progressivism, World Wars I and II, the Great Depression and the Civil Rights Movement. This course also will introduce students to the process of thinking historically, with a focus on original historical sources.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### HIST 136 Modern America 3 cr.

This course examines the history of the United States since World War II, with special focus on the social, cultural, political and foreign policy history that has defined the modern American experience. To examine this history, this course will explore a broad range of topics, from Cold War diplomacy through the nation's

current conflicts in Iraq and Afghanistan, from the evolution of major New Left Social movements to the impact of technology, immigration, and party politics in contemporary America. Devoting particular attention to primary source documents and historical artifacts, including popular music and television programs, this course endeavors to understand the roots of the modern United States. This course is offered Spring semester.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## HIST 140 Maine & NE Maritime Heritage 3 cr.

Maine and New England's Maritime Heritage is designed to give students an introduction to Maine's maritime history in the context of the larger history of the region and country. Students will be introduced to maritime history at the time of the Native Americans, buy the primary focus will be 1500 to the present day, from sailing vessels to supertankers. Course topics will include: early fishing communities in the area, Native Americans, minorities and women in the seafaring community, sail power to steam power, and the current state of the region's maritime realm.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## HIST 145 Maine History

3 cr.

Maine has a rich and varied history, at once unique and simultaneously deeply enmeshed in the broader history of the United States. The course will develop both the singularity of the Maine experience and the contributions of the state to the growth of the nation in various periods. Primary attention will be given to the economic and social development of Maine, that is "history from the bottom up." Consistent stress will also be placed on the relationships of Maine's past to contemporary issues facing the state. The course will stress documentary sources to understand the processes involved in that growth. The arts, musical, visual, and literary, will provide other avenues to understanding how people related to their setting and experiences.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### HIST 155 Historical Archaeology

3 cr.

Historical archaeology is the study of the archaeological remains of literate cultures throughout the world. Historical archaeologists turn to a variety of disciplines including history, anthropology, geography, ecology, and biology as they explore the historic peoples of the world over the last 3,000 years. Students will delve into the origins of historical archaeology in North American, it's methods, and

contributions the field has made to our understanding of the settlement of the continent since the 11th century. This course will include hands-on activities using artifacts and documents, a visit to an archaeological laboratory, and films detailing the excavations at sites such as Jamestown, Red Bay, and the plantation south. This course is offered Spring semester.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## HIST 165 Social History Civil War 3 cr.

In November 1863, Abraham Lincoln addressed the meaning of the Civil War at Gettysburg, Pennsylvania, asserting that the fallen "shall not have died in vain; that this nation, under God, shall have a new birth of freedom." How, and indeed whether, the Civil War came to foster a renascent commitment to liberty in the United States is at the heart of this course on the social history of the Civil War and Reconstruction. To investigate this "new birth of freedom" this course will explore the varied causes of the Civil War and examine the many contested legacies of the conflict through the Reconstruction period and beyond. Considering more than military strategy, this course will draw widely from original sources that illuminate the social and political impact of the Civil War and its aftermath. This course will naturally attend to the remarkable political leaders of the era, but it will also recover the experiences of ordinary Americans from both the Union and the Confederacy. Finally, to fully address whether the era resulted in a ""new birth of freedom,"" this course will consider how Americans' commitment to liberty evolved over time, making a "Second Reconstruction" necessary a full century after Lincoln commemorated the war dead at Gettysburg. This course is offered Fall semester.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### HIST 170 History of World Religions 3 cr.

Religion is a complex network of ideas and actions, both ethical and ritual, that expresses a groups' sense of ultimate meaning of life. Students will examine how the beliefs and values of contemporary and historical cultures shape and are shaped by societal factors, longstanding traditions, and distinctive forms of literary expression. The aim of this course is to introduce students to some of the major religious traditions and to think critically and analytically about the various human phenomena we name "religious." The traditions to be surveyed include Judaism, Christianity, Islam, Hinduism, Buddhism, Native American and newer expressions of religion.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### HIST 175 History of Islam/Middle East

This course presents a survey of Islamic civilizations from the origins of the Muslim faith until the present day. Topics of study include Islamic origins, the early Islamic conquests, the medieval caliphates, the Crusades and Mongol invasions, the rise of Islamic Asian empires, and the era of Western imperialism in Africa, Asia and the Middle East. Special attention will be paid to understanding the Qur'an in its historical context, the status of women in Islamic history, the complex interaction between Islamic societies and the West in the modern age, and the histories of contemporary issues in the Islamic world, such as the Israeli/Palestinian conflict, the tensions between India and Pakistan, and theocracy in Iran.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### HIST 201 History of Science

3 cr.

3 cr.

The History of Science is designed to help the student better understand the impact of science and technology on our way of life, through discussions of the history of science, resulting technological changes, and our relationship to the social and physical environment. Textbook readings will be supplemented with original writings by some of the builders of our scientific society, from Plato and Aristotle to Newton and Einstein. While names, dates, and places are an important part of the course, the emphasis will be to provide an understanding of changes in ideas, knowledge, and culture over time. This course is offered occasionally.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

# HIST 202 History of Technology 3 cr.

The History of Technology will help the student better understand the impact of science and technology on our way of life, through discussions of technological change and the inter-relationship with the social, political and economic forces of society. The course will focus on the impact of major 20th Century American technologies such as the automobile, nuclear energy and computers. This course is offered occasionally.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### HIST 203 History of Health Care 3 cr.

This course is designed to enrich the student's knowledge of the history of science, medicine, and technology that have impacted the development of modern health care. This course will explore the practice of health care providers and study the role of institutions and of the economic and social changes in

the development of health care. This course is offered occasionally.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## HIST 205 Historical Archaeology

3 cr.

The Field School in Historical Archaeology is a handson 3-credit history course that provides the students with on-site archaeological field and laboratory experience. The course will expose students to the field of historical archaeology at the site of the Robert Given Farmstead (c.1761-c.1835) at Pemaquid Falls on the south-central coast of Maine, under the supervision of the project director and several experienced volunteers. This experience is a great hands-on opportunity for college students seeking course credit and experience in historical archaeology, teachers in need of recertification credits, or history buffs interested in exploring an area with a rich colonial history. HIST-155 is recommended prior to enrolling in this course. This course is offered in the Summer semester.

Prerequisite(s): none Corequisite(s): none

#### HIST 208 American Biography

2 ---

This course serves as an introduction to reading and writing biography as an historical genre. By examining biographical techniques, this course evaluates biography as a method of narrating and interpreting the past. To do so, this course focuses on the history of political protest and social activism in the United States, investigating such topics as the radicalism of the American Revolution, utopianism, abolitionism, Progressivism, the labor movement, the struggle for African American freedom, feminism, the movements of the New Left, and environmentalism. Exploring the lives and times of the figures who created and sustained the nation's tradition of radical reform while assessing a range of original historical sources will provide students the chance to understand the challenges - and rewards - of crafting historical biography. This course is offered occasionally.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### HIST 225 African American Freedom Struggle 3 cr.

This course investigates the origins and consequences of the civil rights movement, an ongoing struggle for African-American freedom with roots deep in the American past that profoundly impacted life in the United States between the 1860s and 1970s. This course will focus especially on the efforts of African-American men and women, both ordinary folk and renowned leaders, who fundamentally shaped the

movement for civil equality. To examine this history, this course will: draw from primary sources that recover the voices and experiences of activists, intellectuals, artists, and everyday people who supported the civil rights movement: evaluate the work of civil rights historians who interpret the history of the ongoing freedom struggle: and investigate the regional histories of the civil rights struggle from Montgomery, Alabama to Portland, Maine. This course is typically offered in the Spring semester. This course has been designated as a writing-intensive course. This course is offered occasionally.

Prerequisite(s): ENGL-100 Corequisite(s): none

Horticulture Courses (HORT)

## HORT 100 Intro to Horticulture & Lab 3 cr.

The student will be presented with an overview of the field of horticulture. Career opportunities, educational options and industry associations will be discussed. The principles of propagating, growing, arranging, maintaining, utilizing, and marketing of plants will be presented. Practical experience in greenhouse setting, such as transplanting occurs the first month of class. Field trips are required.

Prerequisite(s): none Corequisite(s): none

# HORT 110 Woody Plant Materials 2 cr.

This course focuses on the identification, selection, uses and culture of trees, shrubs, groundcovers and vines in the northern New England landscape. Native and introduced or exotic plants are discussed, with an emphasis on the identification and selection of plants appropriate to various sites encountered in the urban and rural landscape. Field trips are required.

Prerequisite(s): none Corequisite(s): none

# HORT 120 Pruning

1 cr.

3 cr.

This course is an introduction to the principles and practices of pruning. The course will cover selected topics on the science and art of pruning. Topics will include types and maintenance of pruning tools, reasons for pruning, plant responses to pruning and the various techniques used to effectively prune trees, shrubs, vines, edible fruits and herbaceous plants. Field trips are required.

Prerequisite(s): HORT-110 Corequisite(s): none

#### HORT 130 Soils and Soil Fertility

This is an introductory soil science course investigating the physical, biological and chemical properties of soils and the relationships between plants and soil. Areas of study include: soil sampling and testing, organic matter management and composting, water relationships, soil surveys, soil horizon interpretation, soil fertility, and plant nutrition based on the selection and use of natural and synthetic fertilizers and soil amendments.

Prerequisite(s): none Corequisite(s): none

#### **HORT 140** Integrated Pest Management 3 cr.

This course introduces students to applied entomology and plant pathology, and pest management strategies using the principles of integrated pest management (IPM) Common insect and plant disease organisms are identified and discussed. Emphasis is placed on plant health and pest management tactics resulting from systematic, logical, effective, and environmentally safe management decisions. Field trips are required. Maine Board of Pesticides Control Private Applicators License exam is given.

Prerequisite(s): none Corequisite(s): none

#### HORT 150 Arboriculture & Lab

This is an introductory course in arboriculture: the planting and care of trees and shrubs. Students study the identifying features, growth habits and cultural requirements of urban trees and shrubs. The principles of tree care, pruning, repair and maintenance are covered. The techniques of tree climbing and appropriate knot tying and usage are presented. Preparation to become a licensed Maine arborist is given. Field trips are required.

3 cr.

Prerequisite(s): HORT-110 Corequisite(s): none

#### HORT 155 Tree Fruit Production I 1 cr.

This is the first part of a year-long, three part, introductory study of the general principles and practices involved in handling home and commercial plantings of tree fruit crops commonly grown in this area Part 1 has 16 one-hour weekly class sessions. The student will study the cultural requirements necessary to manage an organic orchard. The principles of IPM, scouting, degree days, orchard establishment, lay-out, tools, and tree maintenance are covered. The techniques of grafting, budding, pruning, and topworking are presented and practiced. Class meetings and labs will be scheduled around yearly orchard operations that occur during the dormant and early growing season. Attendance of MOFGA's Scion-wood & Seed Exchange will be expected.

Prerequisite(s): HORT-130 Corequisite(s): HORT-140

#### HORT 156 Tree Fruit Production II

This is the second part of a year-long, three part, introductory study of the general principles and practices involved in handling home and commercial plantings of tree fruit crops commonly grown in this area Part 2 has 12 1.25-hour weekly class sessions. The student will study the cultural requirements necessary to manage an organic orchard. The principles of IPM, scouting, degree days, orchard establishment, lay-out, tools, and tree maintenance are covered. The techniques of budding and pruning are presented and practiced. Class meetings and labs will be scheduled around yearly orchard operations that occur during the mid-Summer growing season.

Prerequisite(s): HORT-130 Corequisite(s): HORT-140

#### HORT 157 Tree Fruit Production III 1 cr.

This is the third part of a year-long, three part, introductory study of the general principles and practices involved in handling home and commercial plantings of tree fruit crops commonly grown in this area Part 3 has 15 one-hour weekly class sessions. The student will study the cultural requirements necessary to manage an organic orchard. The principles of IPM, scouting, degree days, orchard establishment, lay-out, tools, and tree maintenance and Winter preparation are covered. The techniques of soil testing, apple ripeness, and spraying are presented and practiced. Class meetings and labs will be scheduled around yearly orchard operations that occur during the Fall and early-Winter season. Attendance of a related session during MOFGA's Common Ground Fair and visiting an orchard on Maine Apple Day will be expected and will replace the weekly scheduled class for that week.

Prerequisite(s): HORT-130 Corequisite(s): HORT-140

#### **HORT 175** Placement Training 4 cr.

This summer internship is on-the-job training, providing students with a work experience in an area of horticulture or related field of specific interest to the student. Students are primarily responsible to the employer for the various work responsibilities established. Students are also responsible to the course instructor to complete academic requirements.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### HORT 180 Freshman Seminar

Students present a seminar of a topic of interest. Students are required to attend the "Distinguished Speaker Series." Speakers may include leading

1 cr.

horticultural researchers, industry representatives, green industry professionals or experts in other fields.

Prerequisite(s): none Corequisite(s): none

#### HORT 185 Introduction to Floral Design 3 cr.

This course is an introduction to the profession of Floral Designer The course covers elements, principles and techniques of floral design. Classes will consist of lecture followed by hands on design. Classes will also cover the daily practices of a traditional floral shop. This course will prepare students for a career in the industry, including sales, and merchandising. Students may purchase their arrangements on a weekly basis.

Prerequisite(s): none Corequisite(s): none

#### HORT 200 Herbaceous Plant Materials 2 cr.

This course focuses on the identification, selection, uses, and culture of herbaceous landscape plants in the northern New England landscape. Emphasis is placed on the identification, environmental adaptation, and ornamental value of selected plants, with applications in the perennial and annual gardens.

Prerequisite(s): none Corequisite(s): none

#### HORT 210 Surveying & Mapping 2 cr

This course gives students a working knowledge of landscape mapping as it might relate to landscape construction and design. Students learn various measuring techniques, develop technical skills using a level and transit, and produce base maps showing land contours, surface draining patterns, vegetative characteristics, and other landscape information.

Prerequisite(s): College-level mathematics

Corequisite(s): none

#### HORT 220 Landscape Management 3 c

This course presents the principles and techniques of landscape management. Components of landscape contracting and landscape gardening are discussed, with an emphasis on the efficient and environmentally sound management of the landscaped area. Topics include weed management, hardscape construction elements, landscape maintenance, job estimating and bidding, and business and resource management. Preparation to become a Maine Certified Landscape Professional is given.

Prerequisite(s): HORT-110, HORT-130

Corequisite(s): none

## HORT 230 Nursery & Garden Center Ops

This course introduces students to the scope and nature of the nursery and garden center industries in Maine and New England. Current nursery crop production and management methods are discussed as well as applications of nursery equipment and irrigation techniques. Preparation is given to become a Maine Certified Nursery Professional. Field trips are required.

3 cr.

Prerequisite(s): HORT-110 Corequisite(s): none

# HORT 240 Turfgrass Management 2 cr.

This course presents the principles and practices of managing turfgrass in the landscape. Course content includes the growth, development and maintenance of cool season turfgrasses. Seeding, sodding, mowing, fertilization, turf weeds and pests and related management practices are discussed. Field trips are required.

Prerequisite(s): none Corequisite(s): none

## HORT 250 Greenhouse Management 3 cr.

This is an introductory commercial greenhouse operations and management course. Students become familiar with greenhouse structures and equipment, the greenhouse environment, insect, disease and weed management, and crop production and marketing. Students apply methods and techniques to manage the greenhouse facility and environment and to gain experience and knowledge about common greenhouse crops. Field trips are required.

Prerequisite(s): HORT-130, HORT-200

Corequisite(s): none

#### HORT 271 Herbaceous Plant Design 2 cr.

This course focuses on the use of herbaceous plants in the landscape and provides an opportunity to explore the function and design aspects of herbaceous plants for the outdoor garden in New England Emphasis is placed on creating designs in response to given criteria. A strong background in herbaceous plant material identification and culture is required.

Prerequisite(s): HORT-200 Corequisite(s): none

#### HORT 280 Senior Seminar

Students present a seminar of their work experiences in HORT-175, Summer Placement. Students are required to attend the "Distinguished Speaker Series."

Speakers may include leading horticultural researchers, industry representatives, green industry professionals or experts in other related fields.

1 cr.

Prerequisite(s): HORT-175, HORT-180

Corequisite(s): none

#### **HORT 290** Landscape Design

3 cr.

This course introduces students to the fundamentals of landscape design as it applies to residential and small scale commercial landscapes. Included are the study of site evaluation, plan graphics, plant and landscaping materials selection, business aspects of landscape design and the principles of formal and informal design. Students prepare sketches and finished designs.

Prerequisite(s): HORT-110, HORT-200, HORT-210

Corequisite(s): none

## Hospitality Management Courses (HOSP)

#### HSPM 125 Housekeeping Operations 3 cr

The housekeeping department is the largest single department in most hotels This course gives students a well-rounded knowledge in the exceptionally important area of housekeeping and how it is related to hotel, motel, and restaurant operations. Safety and security, managing inventories, guest room and public area cleaning, linens, and controlling expenses will all be covered in depth.

Prerequisite(s): none Corequisite(s): HSPM-126

## HSPM 126 Housekeeping Operations Lab 1 cr.

In this lab the student intern will become familiar with efficient and effective techniques for cleaning hotel rooms and public areas of a hotel or restaurant The safe use of cleaning supplies and chemicals is stressed along with customer comfort, safety and key control security. Laundry cleaning procedures and linen control will also be covered. Students are required to be in uniform as lab dictates. Tools will be provided by SMCC.

Prerequisite(s): none Corequisite(s): HSPM-125

#### HSPM 135 Front Office Operations

3 cr.

This course deals with the center of operations from the guest's perspective - the front office Operations, reservations, registration, accounting, and the night audit will be stressed. The special areas of guest service and up-selling will be discussed.

Prerequisite(s): none Corequisite(s): HSPM-136

#### HSPM 136 Front Office Operations Lab 1 cr.

This lab will provide the skills necessary to ensure customer satisfaction, safety and security Guest

registration, check-out procedures, key control and phone manners will be a focus. This lab will require evening, over-night and weekend hours. Students are required to be in uniform as lab dictates. Tools will be provided by SMCC.

Prerequisite(s): none Corequisite(s): HSPM-135

## HSPM 175 LRM Internship

3 cr.

3 cr.

This course is designed to give Lodging and Restaurant Management students a working knowledge of hotel operations. Each student will rotate through the various departments of a hotel, under the supervision of a shift manager or designated hotel employee. Students will familiarize themselves with the daily internal operations of a hotel and document the experience using a journal. The internship will be completed over the course program, under faculty guidance. A student may choose from a list of properties or select another establishment with advisor approval. The four areas of study will include, Front Desk, Concierge/Guest Services, Night Audit, and Events Management/Catering. Once started in any of the areas, the area must be completed. No broken service will be counted for credit.

Prerequisite(s): Program Acceptance

Corequisite(s): none

# HSPM 240 Hospitality Marketing

This course looks at how to identify and sell to the most appropriate market segments in local, national and international settings The ability to develop and implement effective marketing plans is stressed. Applying key marketing methodologies to research, sales, advertising, public relations, promotions and pricing are discussed at great length.

Prerequisite(s): none Corequisite(s): none

## HSPM 245 Events Management

This course will provide the knowledge, skills and experience necessary to produce effective events, in accordance with traditional business services, which include but are not limited to the following: advertising; booking and coordinating events; providing audio, visual, wireless internet equipment and print media; catering and banquet services; handicap support services; and entertainment, spousal and child care services, as well as shuttle service.

Prerequisite(s): none Corequisite(s): HSPM-240 Heating, Air Conditioning, and Refrigeration Courses (HVAC)

HVAC 115 Residential Heating Systems 7 cr.

This course covers the study of heating systems beginning with basic energy units, work, power, measurements, fuel, combustion theory, burner, heat exchange controls, system types and application.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### **HVAC 120 Basic Refrigeration**

7 cr.

Basic Refrigeration prepares students for entry-level positions in the industry through theory, demonstration and hands-on practice in a simulated workplace environment The areas of instruction include safety, tools, commercial refrigeration equipment, refrigeration cycles, compressors, evaporators, all associated controls (both electrical and mechanical), and basic electrical theory.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### **HVAC 180 Heating Theory**

3 cr.

This course is a study of heat-loss calculation for domestic burner installation Student study and analyze proper insulation practice, fuel consumption and fuel demand (Degree Day System).

Prerequisite(s): Program acceptance

Corequisite(s): none

## HVAC 215 System Design & Industrial Heating 7 cr.

This course covers System Design, forced hot water and forced warm air piping, and duct layout System zone control is emphasized in all common residential systems. Other topics include light industrial heating equipment and controls.

Prerequisite(s): ELEC-100, HVAC-115

Corequisite(s): ELEC-103

#### **HVAC 220** Basic Air Conditioning

7 cr.

Basic Air Conditioning continues to prepare students for entry level positions in the HVAC industry through comfort cooling theory, demonstration, and "handson" practice in a simulated workplace environment The areas of instruction include review of trade safety practices, proprietary tools, instruments, workplace readiness for installation, service and repair of air conditioning systems and heat pumps.

Prerequisite(s): ELEC-100, HVAC-115

Corequisite(s): none

## Plumbing Courses (HVPL)

HVPL 100 Blueprint Reading and Sketching 2 cr.

This course is a study of isometric plans and elevation drawings for plumbers It includes exercises in bathroom layouts and producing isometric pipe drawings. Restricted to Plumbing and HAC students.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### HVPL 105 Plumbing Application & Methods 7 cr.

This course offers an introduction to the plumbing trade as practiced in the State of Maine Students will develop a working knowledge of the codes governing the installation of plumbing and when where to use the proper materials in the different plumbing systems. Students will also learn the safe and proper way to use the different tools and equipment used in the trade. Students will be required to work on individual projects over the course of the semester.

Prerequisite(s): Program acceptance

Corequisite(s): none

#### HVPL 205 Plumbing Application & Code 7 cr.

This course is a further concentration of Maine Plumbing Code Mock-ups will be used for actual piping and fixture layout allowing students the opportunity to design, build and test plumbing installations. This course continues preparation to qualify the students to sit for the Maine State Journeyman Plumbers Exam.

Prerequisite(s): HVPL-105 Corequisite(s): none

International Cultural Exchange Courses (ICEX)

#### ICEX 130 Cultural Experience - Austria 3 cr.

This course is intended to include SMCC's culinary arts two-week study tour in Austria, which takes place at the end of each spring semester. The study tour is based at Bad Gleichenberg Tourismusschule. The hands-on application in Bad Gleichenberg is 8 full days of cooking Austrian cuisine including: moist methods of cooking beef, poultry, veal and pork; dry methods such as Vienna Schnitzel, cutlets, and smoking of fresh native fish; Austrian dumplings; spaetzle; vegetable salads; dressings and vegetable compliments for the main course. Desserts and pastries include items such as Lindzer torte, Sacher Torte, a variety of dumplings, souffles, Palatchinken, Kaisiershmarm and the beverages to accompany the meals. During our stay, we will have two evenings of wine education in any one of the school?s six wine cellars, and attend a graduation ceremony, performed by the students under the supervision of their chefs and Maitre d'hotel. Additionally, after cooking and serving of the meals, we will visit several castles and learn the history of the Hapsburg Dynasty. Students will also visit wineries, chocolate manufacturing, local agricultural sites and several upscale resort spas and spend the last weekend touring museums and city activities.

Prerequisite(s): none Corequisite(s): none

#### ICEX 160 Cultural Experience-Mexico 3 cr.

For this trip to Mexico, students will be required to complete a significant amount of reading from the work of at least two major Mexican writers. The motifs of geographical proximity and cultural contrast will be the primary focus of study. A journal of the Mexican sojourn and a five-page essay reflecting travel experiences and the required reading will be expected of students. The course will also include one three-hour meeting/discussion and the viewing of at least one Mexican-made film or film made about Mexico.

Prerequisite(s): none Corequisite(s): ENGL-115

#### ICEX 170 Cultural Experience-Ireland 3 cr.

Foreign Cultural Experience (Ireland) is designed as an independent study centered on the college sponsored trip to Ireland during the school vacation in March. The course is designed to promote an understanding and appreciation of Irish culture. Through research. students will develop an awareness of the similarities and differences between Irish and American cultures at the same time developing skills to work independently outside a classroom setting with guidance from faculty. Students will meet with the instructor periodically and develop a topic of research, an appropriate list of resources, a topic outline, and a final paper. An outline of the desired project must be submitted and approved by February 1st. Students will be required to participate in four pre-trip seminars relating to the objectives and coverage to take place during the trip.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

Interdisciplinary Studies Courses (IDST)

#### IDST 120 Symmetry, Shape, and Space 3 cr.

What is the Golden Ratio and how do artists and scientists use it? This interdisciplinary course is a survey of geometrical topics in mathematics and our world, focusing on problem solving and the connections between mathematics and culture. For example, is our social order influenced by mathematics or spatial awareness? A selection of introductory topics will be covered from among these: Euclidian geometry; mathematics and social satire; ruler-and-compass constructions; tessellations; symmetries in two dimensions; and perhaps more as

time permits. The course format emphasizes guided exploration and critical thinking; students will be required to demonstrate an understanding of the material through journal writing and reports. A mathematics text and a novel are used to introduce concepts and related themes. Listed as MATH-120 and IDST-120.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020

Corequisite(s): none

## IDST 140 Working Women 3 cr.

This course is designed to introduce students to new scholarship on women and work It covers the evolution of the household economy as well as the role of women in the paid labor force. Recognizing that work considerations have had a powerful influence on family life and economic status, this course will allow students to place their lives in a larger historical context, enabling them to comprehend the experiences and problems of women and men as gender and work took on new shape and meaning in modern times. The course is writing intensive.

Prerequisite(s): ENGL-100 Corequisite(s): none

### IDST 150 Nature and Culture 3 cr.

This interdisciplinary course uses the combined perspectives of sciences such as biology, ecology and economics together with history, philosophy and literature to study how cultures and individuals interact with nature Through close reading of essays, poems and scientific papers, as well as through students' own field observations and writings on their local environment, this course explores the underlying values and ethical judgments involved in making choices on environmental issues that range from the local to global. Topics include basic concepts such as evolution and cell theory and current issues such as animal rights, biotechnology, global warming and biodiversity conservation. No college science background is required.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020

Corequisite(s): none

#### IDST 160 The Nature of Music/Music of Nature 3 cr.

This 100-level interdisciplinary course combines the scientific perspectives of biology and the artistic perspective of music to examine the relationship of music and nature. This course will integrate composition, performance and instrument-making together with ethnomusicology, evolutionary theory and bioacoustics. Students examine the vocalizations of animals such as birds, frogs and insects, the gamelan music of Indonesia and other cultures, and composers and compositions inspired by nature. The

course culminates in a performance of an original composition using handmade instruments constructed during the semester.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020

Corequisite(s): none

#### Seminar on HIV/Aids in America IDST 170 HIV/AIDS presents challenges for all people. This multidisciplinary course focuses on the biological, sociocultural, political and humanistic components of this worldwide epidemic. It also emphasizes the prevention of the spread of HIV infection. Students will have an opportunity to learn about the science of HIV/AIDS, treatment, issues related to the societal and political impact of HIV/AIDS, and the education/prevention of HIV/AIDS. Students will participate in service learning projects related to

Prerequisite(s): ENGL-050, ENGL-075

educating the SMCC community on HIV/AIDS.

Corequisite(s): none

## Literature Courses (LITR)

#### LITR 220 Introduction to Theater 3 cr.

This course will be an introduction to the collaborative enterprise of theater The central object of study will be dramatic literature and the ways by which it is brought to life in performance. Students will read six to eight full-length plays. This reading will involve detailed scene analysis from the point of view of playwrights, actors, directors and set designers. Students will be introduced to basic rehearsal techniques and will explore the means by which a play may be visually realized upon stage. The course will consist of a survey of the history of Western theater, by means of reading representative plays. This course is writing intensive.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

## LITR 225 The Short Story 3

This course is a study of the modern short story from its origins in the early 19th century to its current form. Areas of focus will include: the history/development of the short story as a prose fiction form, the short story as a reflection of social and cultural movements/issues, and the use of the form as a mode of personal expression and identity. Readings will include a variety of authors, notably key figures in the development of the form as well as contemporary voices poised to influence the future of the genre. This is a writing intensive course.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

## LITR 230 New England Myth and Folklore 3 cr.

This course is designed as an expansion of the fundamental Introduction to Literature course It explores regional oral and written tradition and its influence on New England writers. Utilizing past and present prose and poetry, fiction and nonfiction as catalysts, students will reflect upon and write responses to those experiences and explore their own perceptions of familial and cultural folklore through independent study. This course is writing intensive.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

## LITR 235 African-American Literature 3 cr.

This course surveys the rich literary tradition of African-American literature. It seeks to acquaint students with the major writers, literary movements, and historical events that shaped writers such as Phyllis Wheatley, purchased as a slave by a wealthy Boston family in 1761, through poetry and prose writers of the 21st century. Topics will include the antebellum period, the Gilded Age, the Harlem Renaissance, the Black Power Movement, and the present. Texts will include poetry, prose, short stories, and/or a novel. This course is writing intensive.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

## LITR 240 Varieties of Non-Fiction 3 cr.

This class will examine contemporary creative nonfiction literature in the sub-genres of memoir, nature writing, the personal essay, and literary Although the will journalism readings ""contemporary,"" an overview of the history, variety and evolution of the genre will be provided as well. Students will explore nonfiction as both scholars and writers. The class will be a combination of reading and composing with a focus on critical and creative writing. Students will keep a journal of critical and reflective responses to assigned readings (annotations); comments on the drafts of other students' work, and notes towards one's own work-in-progress. Class time will be devoted to critical examination of work read, sharing of journals, and free-writing exercises suggested by the techniques demonstrated in the texts. This course is writing intensive.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

#### LITR 250 The Twentieth Century Novel 3 cr.

This course surveys the 20th century novel. While the focus will be on the American novel, students will read at least two non-American novels as well. The novel both as an artistic form and a cultural and political artifact will be examined. The course will explore the

literary canon, the works that many believe should be read and studied for all time: How is the canon formed? Who deserves to be included? When appropriate, the course will cover literary movements and periods. This is not to say an author has to be part of a specific group to merit biographical attention; the private and public lives of all the novelists on the reading list will be touched upon, in part to further understand how a great work gets written, but also in part because many of these novelists are simply fascinating people. This course is writing intensive.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

#### LITR 260 Literature and Film

Throughout time humans have had a need to tell a story These stories have had some common goals: to reflect current culture, to inform the future, to examine the past, and to make sense of existence. Film and Literature are two modern forms of media that try to achieve these same goals. This course covers the techniques, vocabulary, and art of film and literature. It also explores the connections between both media. In this course students will learn how to "read" a film, examine the options and choices filmmakers have to tell their stories, identify those choices and link them to the thematic ideas the story holds. This course is writing intensive.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

## LITR 270 Poetry 3 cr.

This course will be a close examination of poetry as a universal form of human verbal expression It will explore the varieties of the genre, the fundamentals of prosody, and the different poetics that have been articulated and embraced through-out history. Different forms and styles of poetry will be examined as well as the different incarnations of poetry among world cultures. In addition to reading a significant quantity of poetry, students will also read critical essays about important poets and essays by poets containing their statements of aesthetics. The course will emphasize poetry deemed ?accessible? - capable of being read and analyzed by a non-specialized audience - but not to the extent of eschewing poetry that has over time been considered profound and enduring. Representative poets will be assigned, and their work will be analyzed in terms of various aesthetic, historical, cultural, political, and ethical contexts. This course is writing intensive.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

LITR 280 Women in Literature

3 cr.

The rich tradition of women's literature has received new attention and benefited from exhaustive scholarship in recent decades This course examines that tradition, concentrating on both public and private writing as integral to the study of women in literature. In addition to the works themselves, the course considers political, economic, and cultural forces which shaped the evolution of women's writing. This course is writing intensive.

Prerequisite(s): ENGL-100 Corequisite(s): ENGL-115

3 cr.

## Machining Courses (MACH)

## MACH 100 Intro to Precision Machining

The Introduction to Precision Machining course will provide an overview of precision metal cutting using good safe work habits. Emphasis is on standard machine design, construction and maintenance. Students are introduced to workplace safety, precision measuring, lathes, milling, grinding and drilling machines.

Prerequisite(s): none Corequisite(s): none

## MACH 105 Basic Machine Theory

This course emphasizes basic precision machining theory. Students will study workplace and machine safety. This course will focus on the development of best work practices and related theory including; precision measuring, layout, hand tool, lathes, drill press, grinding and milling.

Prerequisite(s): MATH-020

Corequisite(s): AEDD-105, MACH-106

#### MACH 106 Basic Machine Lab

This lab complements the theory taught in MACH-105 Basic Machine Theory. Students will apply the skills reviewed in MACH-105 including: precision measuring, layout, hand tools, lathes, drill press, grinding and lathe operations. Development of best work practices will be emphasized including safe work habits to build student confidence in manual machining. Students will complete a series of assignments and Lab Projects as required to validate entry level metalworking competencies.

3 cr.

Prerequisite(s): MATH-020

Corequisite(s): AEDD-105, MACH-105

#### MACH 155 Advanced Machine Theory 4 cr.

The second semester course teaches safe work habits and modular set-ups, and develops student confidence and imagination Emphasis is on advanced machine operations and closer tolerances with projects are introduced. This course is designed to make the student more aware of the importance of efficient use of time in the machining process. Hand tools, drilling, electric discharge machining on a vertical ram machine, grinding and tool & die construction will be explored.

Prerequisite(s): MACH-105, MACH-106

Corequisite(s): MACH-156

## MACH 156 Advanced Machine Lab

**3 cr.** ACH-106

This course is a continuation of lab work in MACH-106. This lab complements the theory taught in MACH-155. Students will apply advanced skills for higher tolerance precision measuring, turning, drill press, grinding and milling operations. Development of best work practices, safe work habits and time management will be emphasized. Students will complete a series of Lab Projects as required to meet NIMS national credentials.

Prerequisite(s): MACH-105, MACH-106

Corequisite(s): MACH-155

## MACH 205 Intro CNC Machining Theory 4 cr.

This course is divided into three units of study, including NIMS national credentialing, CNC (Proto TRAK milling and turning), and CNC (fanuc), PC and various other machine controllers). Information gained from each of the units will be applied to a series of assignments that develop the skills required to produce production planning and CNC codes, tooling and operations for CNC machining.

Prerequisite(s): MACH-155, MACH-156, AEDD-170

Corequisite(s): MACH-206

## MACH 206 Introductory CNC Machining Lab 3 cr.

This lab complements the theory taught in MACH-205 Introductory CNC Machining Theory. Students will work on projects utilizing Computer Numerical Controlled machine tools, (CNC) Proto TRAK milling and turning with Fanuc, PC and various other controllers. Particular emphasis is placed on NIMS national credentialing and safe CNC machine operations.

Prerequisite(s): MACH-155, MACH-156, AEDD-170

Corequisite(s): MACH-205

## MACH 255 CNC Programming 4 cr.

This course is divided into five units, consisting of Advanced Computer Numerical Control (CNC) operations and programming, and four other areas of study. They are metallurgy and materials, Statistical Process Control (SPC) and Quality Control (QC), an integration of various CAD (Computer Aided Design) programs, and CAM (Computer Assisted

Manufacturing) programs (Solidworks and Camworks). Students will complete a capstone project to validate all skills attained in the program.

Prerequisite(s): MACH-205, MACH-206

Corequisite(s): MACH-256

## MACH 256 CNC Machining Lab

This lab complements the theory taught in MACH-255 CNC Programming. Students will work on projects utilizing Numerical Control (CNC) operation and programming, and Statistical Process Control (SPC) and Quality Control (QC). Projects will integrate CAD(Computer Aided Design) programs and CAM (Computer Assisted Manufacturing) programs (Pro CAM, Solid Works, CAM Works). Students will complete a capstone project to validate all skills attained in the program.

Prerequisite(s): MACH-205, MACH-206

Corequisite(s): MACH-255

## MACH 275 Senior Internship

3 cr.

This course is designed to give the student practical experience to enter the job market. Students will be required to complete 90 documented hours of trade related job shadowing and work. This course may be spread out during the senior year as work schedule permits.

Prerequisite(s): MACH-105, MACH-106

Corequisite(s): none

Mathematics Courses (MATH)

#### MATH 020 Numerical Math

3 cr.

This developmental course covers the basic arithmetic of whole numbers, exponents and roots, the order of operations, fractions, decimals, percents, ratio and proportion, measurement and units, integers, geometry, simple statistics and includes applications that use those topics. Students will learn to work without the use of a calculator. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): Appropriate placement

Corequisite(s): none

## MATH 050 Introduction to Algebra 3 cr.

This developmental course covers the standard topics of basic algebra: real numbers and algebraic expressions, using formulas, solving linear equations and inequalities, Cartesian coordinates, graphs of linear equations, direct and inverse variation, exponents and scientific notation, operations with polynomials, factoring of polynomials, solving quadratic equations by factoring, and simplifying rational and radical expressions, and applied problem

solving. The credits earned in this course will not count toward a degree with SMCC.

Prerequisite(s): Appropriate placement

Corequisite(s): none

## MATH 110 Contemporary Mathematics 3 cr.

This course is designed to survey and develop an appreciation for mathematical topics that are useful in our contemporary world such as critical thinking, logic, sets, number theory, algebra and formulas, financial management, measurement units and conversions, geometry, statistics and applied problem solving. It is intended for students not expecting to enroll in additional math classes and is designed to satisfy the general education requirement for mathematics.

Prerequisite(s): MATH-050 Corequisite(s): none

## MATH 120 Symmetry, Shape, and Space 3 cr.

What is the Golden Ratio and how do artists and scientists use it? This interdisciplinary course is a survey of geometrical topics in mathematics and our world, focusing on problem solving and the connections between mathematics and culture. For example, is our social order influenced mathematics or spatial awareness? A selection of introductory topics will be covered from among these: Euclidian geometry; mathematics and social satire; ruler-and-compass constructions; tessellations; symmetries in two dimensions; and perhaps more as time permits. The course format emphasizes guided exploration and critical thinking; students will be required to demonstrate an understanding of the material through journal writing and reports. A mathematics text and a novel are used to introduce concepts and related themes. This course is listed as both MATH-120 and IDST-120.

Prerequisite(s): ENGL-050, ENGL-075, MATH-050

Corequisite(s): none

#### MATH 125 Discrete Mathematics 3 cr.

An introduction to the ideas of discrete mathematics, this course presents the topics needed to prepare the student for success in courses in computer science and electronics. Topics include number systems, logic, computer arithmetic, coding, sets, Boolean algebra, networks, circuits, flowcharts, computer functions, algorithms, graphs, arrays, and summation.

Prerequisite(s): MATH-050 Corequisite(s): none

## MATH 140 College Algebra

3 cr.

This course covers variables and symbols; scientific notation; formulas and literal equations; slope

intercepts, and equations of lines; graphs of linear and quadratic functions; graphs of linear inequalities; solving systems of linear equations; polynomials, products and factors; roots, rational exponents and complex numbers; rational expressions; solving linear, quadratic and higher order equations; solving linear inequalities; an introduction to exponential and logarithmic functions, and applied problem solving.

Prerequisite(s): MATH-050 Corequisite(s): none

## MATH 145 College Algebra & Trigonometry 4 cr.

This course covers variables and symbols; scientific notation; formulas and literal equations; slope, intercepts, and equations of lines; graphs of linear and quadratic functions; graphs of linear inequalities; solving systems of linear equations; polynomials, products and factors; roots, rational exponents, and complex numbers; rational expressions; solving, linear, quadratic, and higher order equations; solving linear inequalities; an introduction to exponential and logarithmic functions; degree and radian angle measure; right triangle trigonometry and its applications; trigonometric functions and their inverses; graphing trigonometric functions; solutions of oblique triangles; vectors; and applied problem solving.

Prerequisite(s): MATH-050 Corequisite(s): none

#### MATH 150 Math for Elementary Teachers 3 cr.

This course is designed to provide future teachers of mathematics with content and knowledge of numerical mathematics that is beyond and deeper than the mathematics they will be teaching. Topics will include attitudes toward mathematics, problem solving, patterns, representation, reasoning and proof, making mathematical connections, and understanding the Real number system. Manipulatives and computer technology will be used to enhance the mathematical concepts. Students will be expected to participate in supervised field experiences.

Prerequisite(s): MATH-140 Corequisite(s): none

## MATH 160 College Trigonometry 3 cr.

Topics include degree and radian angle measure, right triangle trigonometry and its applications, trigonometric functions and their inverses, graphing trigonometric functions, applications of trigonometric functions, analytic trigonometry, solutions of oblique triangles, vectors, polar coordinates and the trigonometric form complex numbers including DeMoivre's Theorem.

Prerequisite(s): MATH-140

Corequisite(s): none

#### MATH 190 Pre-Calculus

3 cr.

4 cr.

This course is designed to add depth and breadth to a student's mathematical background before embarking on a study of the methods of calculus The course covers a review of algebra, linear, and quadratic functions; polynomial, rational, exponential, radical, and logarithmic functions; compositions and inverses of functions; theory of polynomials with the Fundamental Theorem of Algebra; trigonometric functions and identities; additional topics and applications.

Prerequisite(s): MATH-145 <u>or</u> MATH-140 & MATH-160 Corequisite(s): none

## MATH 200 Algebra for Elementary Teachers 3 cr.

This course is designed to provide future teachers of mathematics with content and knowledge of numerical mathematics and algebraic thinking that is beyond and deeper than the mathematics they will be teaching. Topics will include: algebraic thinking (patterns and relationships that lead algebraically); communicating properties and operations of the Real Number System; and the use of algebra in problem solving. Manipulatives and computer technology will be used to enhance the mathematical concepts.

Prerequisite(s): MATH-150 Corequisite(s): none

#### MATH 220 Finite Mathematics

This course emphasized mathematical modeling and decision making in the fields of business, economics, social science, and non-physical sciences Topics include the mathematics of finance, matrices, linear programming, and probability. Data description and probability distributions are optional topics.

Prerequisite(s): MATH-140 Corequisite(s): none

## MATH 230 Statistics 3 cr.

This course is designed for students with little or no experience in statistical analysis. Topics of study include sampling theory, descriptive statistics, probability theory, normal distribution, confidence intervals, hypothesis testing, inference, regression, and correlation. Students will develop skills in collecting, examining, and interpreting data using statistical techniques.

Prerequisite(s): MATH-140 Corequisite(s): none

MATH 260 Calculus I 4 cr.

This course introduces the concepts of limit, continuity, differentiation and integration of algebraic, trigonometric, exponential, logarithmic, and inverse trigonometric functions of a single variable Emphasis is placed on applications of the derivative and the integral using the rules of differentiation and integration.

Prerequisite(s): MATH-190 Corequisite(s): none

## MATH 270 Calculus II

4 cr.

This course is a continuation for Calculus I Topics include an introduction to differential equations, techniques and applications of integration, L'Hopital's Rule, improper integrals, infinite series, conics, and parametric and polar equations.

Prerequisite(s): MATH-260 Corequisite(s): none

Medical Assisting Courses (MDAS)

## MDAS-100 Medical Terminology

This course is designed as an introduction to medical terminology using a body systems approach. Students will develop a basic understanding of medical language by analyzing prefixes, suffixes, root words, and combining forms as they relate to the different body systems and the basic cellular structure.

Prerequisite(s): none Corequisite(s): none

## MDAS-105 Medical Office Procedures

3 cr.

Students will learn and apply through reading, discussions and projects all aspects of the health care operation including the profession of medical assisting, patient communication, telephone triage techniques, scheduling, and medical records.

Prerequisite(s): Program acceptance

Corequisite(s): MDAS-110

## MDAS-110 Intro to Medical Assisting

This course is designed as an introduction to the profession of Medical Assisting. Students will be exposed to various topics related to Medical Assisting which will include background, concepts, ethics/standards of practice, professional responsibilities, current issues in healthcare, and the relationship of Medical Assisting with other healthcare professions.

Prerequisite(s): none Corequisite(s): MDAS-105

## MDAS-150 Disease Pathology/Diagnostic Labs 3 cr.

This course is designed to apply knowledge previously learned in Medical Terminology and Anatomy &

Physiology to the disease process. Common diseases will be covered in a body systems approach. Laboratory and diagnostic tests will also be applied to each body system. The relationship between diagnostic testing and diagnosis of disease will be explored.

Prerequisite(s): MDAS-100, Program acceptance Corequisite(s): BIOL-130, BIOL-131

#### MDAS-160 Intro Clinical Office Procedures 2cr.

This beginning Clinical Procedures course will cover a limited number of procedures necessary for the medical office. This course will include disease transmission and infection control cycle, beginning surgical asepsis, vital sign procedures, obtaining patient history data, and assisting the physician in a general physical examination, and Cardiopulmonary Resuscitation (CPR).

Prerequisite(s): MDAS-105, BIOL-130, BIOL-131 Corequisite(s): BIOL-135, BIOL-136

#### MDAS-205 Billing Procedures & Admin

This course will focus on insurance, billing, and coding procedures to include the operations a medical billing office performs to collect revenue from physician rendered services and supplies, covered or noncovered, by commercial, State, Federal, and thirdparty liability insurance companies by ethical, compliant, and legal methods. Also covered will be CPT/HCPCS procedural coding and ICD-9-CM diagnostic and inpatient coding procedures.

Prerequisite(s): MDAS-105, MDAS-150, HLTH-155 Corequisite(s): none

## MDAS-210 Clinical Office Procedures

This course is designed to provide students with the didactic knowledge necessary to effectively assess and treat patients in a variety of clinical medical settings. Lessons will include instruments and equipment used in the medical practice settings, medical and surgical asepsis, general physical examination venipuncture, common lab tests, preparedness, and administration of medications.

Prerequisite(s): MDAS-150, MDAS-160, HLTH-155, BIOL-135, BIOL-136

Corequisite(s): MDAS-211

#### MDAS-211 Advanced Clinical Lab Procedures

This course is designed to provide students with the practical knowledge necessary to effectively assess and treat patients in a variety of clinical medical settings. Lessons will include instruments and equipment used in the medical practice settings, medical and surgical asepsis, general physical examination skills, venipuncture, common lab tests, and administration of medications. Lab sessions will support didactic information and provide students with the skills necessary to perform the procedures required to treat patients in a variety of clinical medical settings. Procedures will include: venipuncture, setting up sterile fields, changing sterile dressings, administering medications, body irrigations, assisting with physical exams/surgical procedures, and performing various laboratory tests (e.g., urinalysis, blood glucose).

Prerequisite(s): MDAS-150, MDAS-160, HLTH-155,

BIOL-135, BIOL-136 Corequisite(s): MDAS-210

3 cr.

3 cr.

#### MDAS-225 Computers in Medical Office 3 cr.

This course will cover the application of computers to manage the information flow in the medical office setting. Students in this course will work within an operating practice management and electronic medical record system where receiving patients, entering and changing demographics and billing information, performing clinical visits, doing referrals, and several other real-life medical office tasks will be covered.

Prerequisite(s): Program acceptance, CMPT-101 Corequisite(s): none

#### MDAS-250 Medical Ethics and Law 3 cr.

This course will provide students with an overview of laws, ethics, liabilities, and their relationships as they relate to the Medical Assisting profession. Covered topics will include ethical and legal responsibilities, licensure requirements, physician and patient rights, negligence, medical records confidentiality, and revocation of licensure

Prerequisite(s): Program Acceptance

Corequisite(s): none

## MDAS-260 Medical Office Administration

This advanced course is designed to integrate administrative office skills including: human resources business organization management, professionalism, quality assurance, healthcare compliance, office safety compliance, patient interaction and other office communications. maintenance of supplies and equipment and appropriate documentation.

Prerequisite(s): MDAS-205 Corequisite(s): none

## MDAS-275 Medical Assisting Practicum

4 cr. This practicum is designed to reinforce the accumulation of knowledge acquired in the Medical Assistant Program. The practicum experience affords students the opportunity to spend 160 hours of directed practice in a medical office setting applying theory to medical practice.

Prerequisite(s): Department approval

Corequisite(s): none

## Management Courses (MGMT)

MGMT 110 Princ. Management & Leadership 3 cr. This course is an introduction to the tasks necessary to motivate and guide people within an organization so that its goals are reached Students will learn about the basics of planning, delegation, and producing results through others. Most important is the emphasis placed on the skills of leadership, where an individual may have responsibilities not explicitly defined by the formal organization. Instead, that person has to persuade and encourage a group to take action cooperatively in the face of risk or hardship. Extensive self-assessments are used.

Prerequisite(s): none Corequisite(s): none

Marketing Courses (MKTG)

## MKTG 200 Marketing

3 cr.

This course merges activities used to market a product or service into a logical framework Students learn about building relationships with customers according to the customer's needs. Skills developed and used are segmenting the market, defining buyer behavior, positioning a product to satisfy customer needs, and developing a strategy for the product, price, and marketing communication. Areas of focus include modern distribution systems such as direct marketing, telemarketing, and the Internet. There is also extensive focus on E-commerce.

Prerequisite(s): 30 credits earned

Corequisite(s): none

#### MKTG 250 Advertising

3 cr.

The purpose of this course is to introduce students to the methods available for the development of an integrated marketing communications program It will provide a conceptual framework for understanding the various forms of marketing communications and the interrelationships among them.

Prerequisite(s): BUSN-100 Corequisite(s): none

Music Courses (MUSI)

## MUSI 100 Music Appreciation and History 3 cr

Music Appreciation and History is a one-semester survey of the Western music tradition, from the chant of the Middle Ages to the art music of this century It includes study of the major composers, genres and forms of each period. An understanding of musical style through repeated listening is a primary goal of the class.

Prerequisite(s): none Corequisite(s): none

#### MUSI 105 SMCC Chorale

1 cr.

This performance based course is for students, experienced or inexperienced, interested in vocal music expression The chorale performs several times a year, presenting a variety of musical styles. Basic vocal techniques are taught. Ability to read music is not required. The chorale rehearses once a week throughout the semester. May be repeated a maximum of three times for credit.

Prerequisite(s): none Corequisite(s): none

#### MUSI 125 World Music

3 cr.

World Music is an introduction to the music and musical life of many cultures of the world, emphasizing the unique character of each musical expression, as well as those elements that are universal to all music. The great diversity of global musical styles will be explored and celebrated, with an emphasis on a relativistic view: the belief that each society has a musical system that suits its culture, and should be understood and appreciated within that cultural context.

Prerequisite(s): none Corequisite(s): none

## MUSI 135 Jazz Appreciation & History

3 cr.

Jazz Appreciation and History is an introductory survey of American jazz history including key styles and seminal musicians from the birth of jazz until the present day.

Prerequisite(s): none Corequisite(s): none

Nursing Courses (NURS)

## NURS 100 Dosage Calculation

1 cr.

This course is required for pre-nursing students to acquire the mathematical skills and knowledge used by nurses in the clinical setting. Students must have strong basic math skills (knowledge of decimals, fractions, metric system, conversions between systems of measurement, ratio-proportion, and ability to do basic algebraic equations) required for medication administration. Emphasis is placed on the safety and accuracy required for medication administration. This course will include clinically-based problems that provide students with practice and mastery of clinical

calculations. Students taking the on-line version of this course must be able to work independently.

Prerequisite(s): MATH-050 Corequisite(s): none

## NURS 110 Transition to the ADN Role 3 cr.

This course assists LPN upgrade students to begin the transition from licensed practical nurse (LPN) to associate degree nursing students. The core concepts for competent nursing practice are reviewed: nursing process, caring, and professional behaviors. Opportunities are provided to review basic nursing skills related to patient assessment, use of the nursing process, documentation, therapeutic interventions, caring behaviors, and professional behaviors. Emphasis is placed on methods to be successful in classroom requirements and clinical practice as an associate degree nursing student. Upon completion of this course, students will have the skills and knowledge needed to make a successful transition to Nursing 2, the first nursing course required for LPN upgrade students.

Prerequisite(s): Department approval

Corequisite(s): none

## NURS 125 Nursing I

9 cr.

In this beginning nursing course, the core concepts for competent nursing practice are introduced: nursing process, caring, and professional behaviors. Emphasis is placed on learning basic nursing skills; patient assessment skills; therapeutic interventions to meet patients' individual needs; caring behaviors to promote therapeutic nurse-patient relationships; and professional behaviors expected in classroom and clinical areas. Students begin to use theoretical knowledge in clinical practice. Upon completion of this course, students are able to provide accurate and safe nursing care in selected skilled care clinical settings as beginning nursing students, using concepts presented in this course. Successful completion of Nursing 1 is required for continuation in the nursing program.

Prerequisite(s): NURS program acceptance Corequisite(s): none

## NURS 175 Nursing II

9 cr.

In this second nursing course, the core concepts for competent nursing practice are expanded: nursing process, caring, and professional behaviors. Emphasis is placed on clinical nursing skills; patient assessments for changes in health status, responses to health problems, and effects of therapeutic interventions; use of standardized teaching plans; written and verbal communication skills; caring behaviors; and professional accountability for patient care, including legal and ethical ramifications for nursing practice. Professional behaviors are expected in classroom and

clinical areas. Students incorporate theoretical knowledge in clinical practice. Upon completion of this course, students are able to provide accurate and safe nursing care in selected medical, surgical, and maternity clinical settings, using concepts presented in this course. Successful completion of Nursing II is required for continuation in the nursing program.

Prerequisite(s): NURS-125 Corequisite(s): none

## NURS 225 Nursing III

9 cr.

In this third nursing course, students' skills and knowledge are advanced in the core concepts for competent nursing practice: nursing process, caring, and professional behaviors. Emphasis is placed on students' use of the nursing process as a critical thinking tool for clinical decisions, implementation of safe care, and patient education; management of basic care components; effective verbal and written communication; therapeutic caring relationships; and professional accountability for implementation and evaluation of patient care. Professional behaviors are expected in the classroom and clinical areas. Students continue to incorporate theoretical knowledge in clinical practice. Upon completion of this course, students are able to provide accurate and safe care in selected medical, surgical, and pediatric clinical settings, using concepts presented in this course. Successful completion of Nursing III is required for continuation in the nursing program.

Prerequisite(s): NURS-175 Corequisite(s): none

#### NURS 275 Nursing IV

9 cr.

In this final nursing course, students use prior theoretical and clinical learning experiences to incorporate the core concepts for competent nursing practice: nursing process, caring, and professional behaviors. Emphasis is placed on students systematic use of the nursing process and critical thinking skills to manage patient care; making clinical decisions for accurate and safe patient care; patient education, particularly for patients to make informed decisions and provide self-care; utilization of management skills for effective communication; and accountability for all aspects of patient care. Students demonstrate professional behaviors in all settings. Students integrate theoretical knowledge with clinical practice. Upon completion of this course, students are able to provide and manage comprehensive care in selected medical, surgical, and psychiatric clinical settings. Successful completion of Nursing IV is required for students eligibility to take the NCLEX-RN examination.

Prerequisite(s): NURS-225 Corequisite(s): none

NUTR 110 Normal Nutrition & Lab 4 cr.

This course is an introduction to the field of nutrition, which includes the study of carbohydrates, fats, proteins and other essential nutrients. Students will also gain a workable knowledge of digestion, absorption, and metabolism, life cycle nutrition, nutrition guidelines, and nutrition programs. The concepts covered in the lecture course are explored in greater detail during lab time using a variety of activities including food experiments, anthropometric measurement, nutrient analysis, and enhanced problem sets.

Prerequisite(s): ENGL-050, ENGL-075, MATH-020

Corequisite(s): none

## NUTR 210 Intro Medical Nutrition Therapy 3 cr.

This course is designed to investigate the use of nutrition in the treatment of disease. Emphasis will be placed upon diets which modify for specific nutrient groups, calories, and food testures. Special needs of allergy patients, athletes, alcohol use, and fad food claims will also be explored.

Prerequisite(s): NUTR-110 Corequisite(s): none

Oceanography and Marine Science Courses (OCEA)

## OCEA 100 Elements of Nautical Science 2 cr

This course will provide students with a brief introduction to navigation, nautical publications, electronic navigation, fire fighting, rules of the road, and practical experience in small boat handling.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): MATH-050

## OCEA 105 Elements of Oceanography 4 cr.

This introductory science course is designed to give students an overview of marine processes and phenomena as a foundation for further learning about the oceans. Many measurable oceanographic parameters are defined and described. Major topics are supported by appropriate laboratory activities.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): MATH-050

## OCEA 125 Sea Time I

2 cr.

This is the first of four semesters of Seatime It is designed to introduce AMBO students to the basic activities of field and aquatic research, often while on a research vessel. Students will be taught introductory field sampling methods, including water-quality techniques, basic navigation, biological sampling, and data acquisition and analysis.

Prerequisite(s): Program acceptance Corequisite(s): OCEA-100, OCEA-105

#### OCEA 175 Sea Time II

2 cr.

This is the second semester of Seatime In this course students continue to use water-quality and biological sampling methods, plus technologically advanced equipment. Collection and identification of algae and invertebrates is emphasized.

Prerequisite(s): OCEA-125 Corequisite(s): none

## OCEA 205 Physical/ Geological Oceanography 4 cr.

This course gives an overview of physical processes occuring in ocean basins. Topics include the morphology, circulation and geological processes occurring in the oceans as well as salt and heat budgets. In addition, the course will look at coastal features and near shore circulation. Students will use oceanographic software to interpret data gathered at sea during Seatime. There will be several field trips.

Prerequisite(s): OCEA-105 Corequisite(s): OCEA-225

#### OCEA 225 Sea Time III

2 cr.

This course is the third of a four course sequence. The course is designed to reinforce concepts learned in Nautical Science, Oceanography, Marine Botany and Marine Invertebrate Zoology. Students will spend time on a boat in Casco Bay taking physical and biological measurements during September and October.

Prerequisite(s): OCEA-175 Corequisite(s): none

#### OCEA 275 Sea Time IV

2 cr

Seatime IV is a capstone course that requires students to demonstrate their proficiency in field work. Students design and implement a project addressing an oceanographic or biological topic in Casco Bay. Students collect and analyze data and write a report that is presented to the faculty. Past projects have included: Current structure in Portland Harbor, Distribution of shallow water fish populations, documenting the onset of the spring plankton bloom and habitat mapping with sidescan and multibeam sonar.

Prerequisite(s): OCEA-225 Corequisite(s): none

Philosophy Courses (PHIL)

#### PHIL 100 Introduction to Philosophy 3 cr.

This course is an introduction to the "basics" of philosophy. It will introduce the basic questions, frame the basic arguments these questions have engendered, and introduce students to the major figures in the history of philosophy who have both raised the questions and attempted to answer them.

This course seeks to define what philosophy is and what its parameters are. It will also attempt to answer the question "why philosophize"?

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## PHIL 105 Ethical Dilemmas 3 cr.

This course will examine the roots of the cultural values in American life and how these values affect decision-making on social, political, and personal moral issues The course will survey the major philosophical thought of Western civilization focusing on ethics and how they are derived from metaphysical as well as social and political philosophy. Students will be assigned readings that deal both with ethical theory and ethics in practice. Two works of literature, one ancient and one modern, will also be assigned and analyzed in terms of the ethical issues they raise.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

# Physics Courses (PHYS) PHYS 110 Technical Physics & Lab

4 cr.

This course represents a non-calculus, but rigorously algebraic, approach to the analysis of the concepts and relationships of all the principal areas of Physics Topics of study include Mechanics, such as Kinematics in one and two dimensions, Dynamics and Newton?s Laws of Motion, Friction, Rotations and Torque, Uniform Circular Motion, Universal Gravitation, Momentum and Angular Momentum, Kinetic and Potential Energy, Properties of Solids and Fluids, Strength of Materials, Motion, Waves, Sound, Light Harmonic Electromagnetic Waves, Heat and Thermodynamics, and Electricity and Magnetism, as well as Relativity, and Quantum and Nuclear Physics, if time permits. Emphasis will be placed in understanding natural phenomena and solving numerical problems in both the Metric (SI) and English (US) Systems of units. Weekly laboratory experiments help the student develop a feel for realistic measurements and meaningful calculations. Successful completion of this course fulfills the Associates of Arts degree science requirement.

Prerequisite(s): MATH-020 Corequisite(s): MATH-050

## PHYS 150 College Physics I & Lab 4 cr.

The first semester of a two semester series, this course represents a non-calculus, but rigorously algebraic, approach to the analysis of the concepts and relationships of Mechanics: Kinematics in one and two dimensions, Dynamics and Newton?s Laws of Motion, Friction Forces, Rotations and Uniform Circular Motion, Universal Gravitation, Torque and Static

Equilibrium; Momentum and Angular Momentum, Kinetic and Potential Energy. Emphasis will be placed on understanding natural phenomena and solving numerical problems in both the Metric (SI) and English (US) Systems of units. Weekly laboratory experiments help the student develop a feel for realistic measurements and meaningful calculations in Mechanics.

Prerequisite(s): MATH-050

Corequisite(s): MATH 145 or MATH 140 & MATH-160

## PHYS 155 College Physics II & Lab 4 cr.

The second part of a two semester series, this course represents a non-calculus, but rigorously algebraic, approach to the analysis of the concepts and relationships in Solids and Fluids, Heat and Thermal Physics, Thermodynamics, Waves and Sound, Light, Electromagnetism, and Modern Quantum, Atomic and Nuclear Physics. Emphasis will be placed in understanding natural phenomena and solving numerical problems. Weekly laboratory experiments help the student develop a feel for realistic measurements and meaningful calculations in the topics studied.

Prerequisite(s): PHYS-150 Corequisite(s): none

Political Science Courses (POLS)

## POLS 100 Contemporary World Problems 3 cr

Contemporary World Problems is an introductory course that will expose the student to current events worldwide. The course will introduce students to the structure and functions of the U.S. government and policy issues facing the nation and the world. These issues include the federal budget, the U.S. and global economy, international terrorism, weapons of mass destruction, human rights and the global environment. The course examines the interconnection between the student's life at a community college in Maine and the rapidly changing, globally interdependent world in which they live.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## POLS 105 Intro to American Government 3 cr.

This course introduces students to the institutions and political practices of American Government. Students will gain an understanding of the origins, structure and operation of the American government system. The course focuses primarily on the structures and processes at the national level, but will also touch on state and local governments. This course will examine the relationship between the President, Congress, and Courts. It will review the political dynamics of

campaigns and elections and also examine the fundamentals values of freedom and equality under the Constitution.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## POLS 110 Intro to International Relations 3 cr.

Introduction to International Relations examines the political and power relationships among the nations of the world. The course introduces and analyzes current world issues including the impact of the Cold War on global relations, the war on terror, international environmental issues, globalization, international health concerns, militarism, and the foreign policies of countries toward these complex issues. The important role that cultural perceptions play in global relations is emphasized. Through assigned readings and class discussions, students gain an understanding of the many different actors in international relations and how they affect today's global society.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

#### POLS 115 State and Local Government 3 cr.

Most citizen and business contact with government takes place at the state and local levels. This course examines the politics, policies and processes of Maine government particularly, but within the context of state and local governments nationally. It will review the legislative, judicial and administrative functions of government with attention to the Constitutional structure of federalism, intergovernmental relations, and contemporary issues. Topics covered may include law enforcement, land use planning, education, social services, taxation and budgeting. This course is offered occasionally.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

## POLS 120 Introduction to Public Policy 3 cr.

Introduction to Public Policy will introduce students to concepts in public policy formation, implementation and evaluation in the American political system. An array of public policy issues will be presented from which class selections will be made for in-depth study and analysis. This course begins with a thorough analysis of the federal government's financial condition as a backdrop for government policy decisions. The use of the federal budget with its limitations and opportunities in providing resources and benefits as the fundamental tool in government policymaking will be explored. Policy discussions will be drawn from domestic and foreign policies treating economic, social welfare, medical care, environmental, and national security issues. The course will be centered on class and group discussions, presentations, debates, independent student research and written analysis.

Prerequisite(s): ENGL-050, ENGL-075 Corequisite(s): POLS-100 or POLS-105

#### POLS 175 **Political Science Internship**

Political Science Internship is a three-credit course in which students will combine readings, reports and seminar discussions with professional experience in the local offices of Maine's US. Congressmen and Senators, the State Legislature or other area political organizations. Students will spend approximately 12 hours per week in the assigned office, carrying out a variety of tasks from standard office work to constituent work and small research projects. During the semester, the student also will meet regularly with their SMCC instructor and other interns to discuss readings and experiences.

Prerequisite(s): none

Corequisite(s): POLS-100 or POLS-105 or POLS-110

#### POLS 180 Gender and Politics

This course is an analysis of the role that gender plays in shaping politics and other aspects of American society based on the history of women's quest for power. It will examine the impact of politics on women's lives and women's impact on politics within the United States and will survey global issues pertaining to women and politics. Using classic and contemporary feminist texts, students will examine theories of gender difference, gender voice, gender and political office, and gender and public policy. This course is offered occasionally.

Prerequisite(s): none

Coreguisite(s): POLS-100 or POLS-105 or POLS-110

#### POLS 205 Comparative Intro-Political Science 3 cr.

Comparative Introduction to Political Science will expand the student's understanding of the practices and procedures involved in political institutions at the national and international levels of government. This course provides an introduction to the study of government and politics from a comparative perspective, focusing especially on political structures and behavior in a wide range of nations and international organizations. Students will gain an understanding of the institutional and operations of American government through a comparative analysis of other political systems. Students will examine democratic, authoritarian and totalitarian forms of government and the ideological foundations on which they are based.

Prerequisite(s): POLS-100 or POLS-105

Corequisite(s): none

## POLS 212 Peace, War, and Security

This course will examine the ilitiary, economic, political and cultural factors that lead to peace. It will look at the changing nature of war, whether between countries, within a country, or, as with the war on terror, virtually independent of nation states. Last, it will set out a framework for looking at security on a national, as well as local, concrete level. The war in Irag will be a central case study, but students also will be able to study other conflicts, such as Kosovo, the Sudan, and the war on terror.

Prerequisite(s): POLS-100 or POLS-105 or POLS-110

Corequisite(s): none

## POLS 250 Introduction to Political Theory

Using selected contemporary and classical readings in political philosophy, this course will study important political systems, such as democracy and socialism, and key political concepts such as political authority, law, personal liberty and justice. Lecture and classroom discussion will emphasize applications to contemporary events and problems.

Prerequisite(s): ENGL-050, ENGL-075 Corequisite(s): POLS-100 or POLS-105

Psychology Courses (PSYC)

#### PSYC 100 Introduction to Psychology 3 cr.

This course is designed to provide a broad overview of the field of Psychology. Special attention will be given to helping the student become a better thinker, by learning to take charge of ideas one has about psychology. The goal of this course is to think consciously, deliberately and skillfully about human behavior. Topics such as physiological psychology, perception, learning, cognition, emotions, health psychology, psychological disorders, as well as others are included.

Prerequisite(s): none

Corequisite(s): ENGL-050, ENGL-075

#### PSYC 200 Abnormal Psychology

3 cr.

This course is an introduction to the psychological theory and research regarding abnormal maladaptive human behavior. lt provides comprehensive overview of the major categories of abnormal behavioral disorders with an emphasis on theory and research (e.g., schizophrenia, affective disorders, substance abuse, eating disorders, etc.) Special attention will be given to the study of major concepts, theoretical perspectives, empirical findings and historical trends as they pertain to psychological problems: as well as exposure to issues in diagnostics and treatment techniques. This course is writing intensive and will use a variety of types of writing (e.g., class writing, reaction papers), in addition to or in place of more conventional formal papers.

Prerequisite(s): ENGL-100, PSYC-100

Corequisite(s): none

## PSYC 215 Social Psychology

3 cr.

This course introduces the major classic and contemporary theories and research in social psychology. One definition of social psychology is that it represents "" an attempt to understand and explain how the thought, feeling, and behavior of individuals are influenced by the actual, imagined, or implied presence of others"" (Allport, 1985). Defined more broadly, social psychologists study social behavior. This course investigates the mental processes, situational factors, individual differences, and group phenomena that influence the way people interact with other people.

Prerequisite(s): ENGL-100, PSYC-100

Corequisite(s): none

## PSYC 220 Developmental Psychology 3 cr.

This course utilizes a life-span approach to human development, focusing on factors associated with physical, cognitive, social, and personality development from birth through adulthood. Using major developmental theories as a framework, both psychological and environmental factors and their interplay will be discussed. Topics will also include philosophical and historical bases of theories, as well as cultural factors which influence development. Students will be encouraged to think critically and apply their knowledge of development to their own lives.

Prerequisite(s): ENGL-050, ENGL-075, PSYC-100

Corequisite(s): none

## PSYC 225 Educational Psychology

3 cr.

3 cr.

Educational Psychology is the overview of the psychology of learning, motivation, growth and development, personality dynamics and social adjustment. Emphasis is placed on the learning process and related ideas such as child development, individual differences, cognition, learning environments, motivation, and effective teaching-learning relationships in schools.

Prerequisite(s): ENGL-050, ENGL-075, PSYC-100

Corequisite(s): none

## PSYC 230 Sport Psychology

This course provides an overview of the major areas of research and application in the area of sport psychology. It involves the study and application of psychological principles, which influence behavior,

enhance skill acquisition, and maximize sport performance of athletes, coaches, and others involved in sports. Topics may include philosophies of sport, motivation, personality of coaches and athletes, recreational sports for children, training and learning principles, mind/body relationships, and the effects of anxiety, arousal, and relaxation on performance and current research in the field.

Prerequisite(s): ENGL-050, ENGL-075, PSYC-100

Corequisite(s): none

## PSYC 235 Psychology of Gender

This course focuses on the way gender influences behavior and personality. The class will center on how women and men are influenced by social, psychological, and biosocial constructions of gender. The student will use critical thinking skills to develop and evaluate gender, in terms of psychological concepts, empirical studies, and personal knowledge.

3 cr.

Prerequisite(s): ENGL-050, ENGL-075, PSYC-100

Corequisite(s): none

## PSYC 240 Theories of Personality 3 cr.

In this course major personality theorists and their theories will be reviewed, including psychodynamic, humanistic, behavioral, cognitive, biological, trait, and cultural perspectives. In addition, students will explore how culture and social context shape understanding of personality and the development of theories.

Prerequisite(s): ENGL-050, ENGL-075, PSYC-100

Corequisite(s): none

Public Safety Courses (PUBS)

## PUBS 104 Public Safety Telecommunicator 3 cr.

This course is designed to prepare students for emergency telecommunicator duties, to meet the NFPA 1061 requirements of the Professional Qualification Standard for Public Telecommunicator I, as well as meeting the State of Maine statutory requirement for those employed at public safety dispatch centers in Maine (25 MRSA §2926 2(b)) . The course combines instructor presentations, student activities and simulation exercises to develop skills and knowledge in the field. The course will provide the student with the knowledge of roles and responsibilities, current technologies, interpersonal communications skills, telephone communication and call processing skills, radio broadcast procedures, legal aspects of public safety communications and stress management skills. In addition the course will introduce students to the skills necessary to manage requests for police, fire and medical services. This course is cross-listed as CJUS-104, EMST-104, and FIRE-104

Prerequisite(s): none Corequisite(s): none

#### Radiography Courses (RADG)

## RADG 100 Introduction to Health Sciences 3 cr.

This course is designed to introduce the student to the fundamental concepts of patient care, including radiation protection and considerations of patient physical and psychosocial conditions. Routine and emergency patient care procedures will be described as well as aspects of patient assessment and assistance, medical-surgical asepsis, infection control, patient communication and death and dying. Radiation protection will include types of interaction of radiation and matter, as well as radiation safety and protective measures for the patient as well as personnel. (Note: The role of the radiographer in patient education, communication skills, ethical and legal issues will be covered in Introduction to Clinical Practicum I.)

Prerequisite(s): Program acceptance

Corequisite(s): none

## RADG 105 Radiographic Procedures I 4 cr.

This lecture/demonstration course is designed to introduce the student to medical and radiological terminology, the basic routine positions of the chest, abdomen, upper and lower extremities, and fluoroscopic/contrast procedures: through lecture notes, hands-on experience and competency examinations in the SMCC Radiographic Simulation Laboratory.

Prerequisite(s): Program acceptance

Corequisite(s): none

## RADG 115 Radiographic Exposure

This course deals with the prime factors of exposure and the technical factors affecting image quality. The relationship between the prime factors of exposure and the accessories that affect radiographic density/brightness will be emphasized. Film composition, automatic processor construction and chemistry are also discussed. Computed radiography and direct digital imaging are also discussed.

Prerequisite(s): Program acceptance

Corequisite(s): RADG-130

## RADG 130 Clinical Practicum I

This course correlates the academic concepts into the clinical environment, dealing directly with patients. Under supervision, students will observe and perform radiographic examinations of the chest, abdomen, upper and lower extremities. Clinical competency evaluations are utilized to document clinical performance.

Prerequisite(s): Program acceptance

Corequisite(s): none

## RADG 155 Radiographic Procedures II 4 cr.

This lecture/demonstration course is a continuation of Radiographic Procedures I. The student will continue with an in depth study of the routine positions of the pelvic girdle, vertebral column, ribs, sternum, skull, facial bones and sinuses. Radiographic procedures of the urinary system, mobile radiography, pediatrics and venipuncture as well as tomographic principles will be studied. Demonstrations and competency testing procedures are conducted in the SMCC Radiographic Simulation Laboratory.

Prerequisite(s): RADG-105, RADG-130

Corequisite(s): none

## RADG 160 Clinical Practicum II

Students continue in the clinical setting to perform radiographic examinations of patients under supervision. In addition to those examinations previously performed, students will learn to perform

radiography.

Prerequisite(s): RADG-130 Corequisite(s): none

## RADG 175 Radiographic Analysis I

1 cr.

5 cr.

This course provides students with comprehensive and detailed instruction in the evaluation of diagnostic quality radiographs and computer-generated images. Students will assess radiographs based on the fundamentals of exposure, processing and positioning.

radiographs of the spine, contrast studies and mobile

Prerequisite(s): RADG-160 Corequisite(s): RADG-190

## RADG 190 Clincal Practicum III

4 cr.

During this semester, students are able to continue to perform radiographic examinations on increasingly difficult patients. Continuity of procedural area is achieved with this five-day-per-week clinical practice and allows freshmen students to achieve competencies appropriate to this semester.

Prerequisite(s): RADG-160 Corequisite(s): none

## RADG 205 Radiographic Procedures III 3 cr.

This course included the study of surgical\trauma radiography as well as the basic concepts, related physics and clinical applications in the specialty areas of mammography, computerized tomography scanning, cross sectional anatomy, interventional radiography, magnetic resonance imaging and computer applications in radiography.

Prerequisite(s): RADG-155 Corequisite(s): none

## RADG 215 Radiographic Exposures II 3 cr

This course of study provides a review of all factors affecting radiographic density. Utilizing a format of lecture-demonstrations, all factors affecting radiographic contrast, recorded detail, distortion will be covered. A review of film sensitometry will also be included along with a comparison of film-screen combinations and digital imaging relative to speed, resolution, and reduction of patient exposure. Students are encouraged to present, in class, challenges related to exposure encountered in clinical practicum. A review of PACS systems will also be covered.

Prerequisite(s): RADG-115 Corequisite(s): RADG-160

## RADG 230 Clinical Practicum IV

6 cr.

This course is designed to study those procedures considered less general to the Radiology Department. Students are introduced to the most common of these procedures, the anatomy demonstrated, the radiographic projections, and use of the equipment. Students are also taught the value of properly analyzing image quality.

Prerequisite(s): RADG-175, RADG-190

Corequisite(s): none

## RADG 235 Applied Physics for Radiography 3 cr.

This course begins with a review of x-ray production. It continues with a study of electrodynamics, x-ray circuitry, components of the x-ray circuitry, methods of rectification, construction of and types of x-ray tubes, x-ray production and the x-ray beam. Image intensification, image display, and video units, are also covered.

Prerequisite(s): RADG-190 Corequisite(s): none

#### RADG 245 Radiographic Pathology 3 cr

This course is designed to introduce theories of disease causation and the pathophysiologic disorders that compromise healthy systems. Etiology, pathophysiologic responses will be presented, with a strong focus on the clinical manifestations and appearances of diseases of various imaging modalities.

Prerequisite(s): BIOL-135, BIOL-136 Corequisite(s): Program acceptance

## RADG 255 Principles of Quality Assurance 2 cr.

This course is designed to familiarize students with the basic concepts of quality assurance as applied to

diagnostic radiographic equipment and image processes. As x-ray equipment has become more complex, the need for radiographers to understand detailed workings and limitations of equipment has become more important. This course will provide students with the necessary theoretical background and experimental skills to permit him/her to function effectively as part of a team to measure performance parameters and to evaluate quality assurance programs.

Prerequisite(s): RADG-235 Corequisite(s): none

## RADG 260 Clinical Practicum V

6 cr.

1 cr.

This course concentrates on the continuation of perfecting previously acquired skills. In addition, students will have the opportunity to rotate through and observe specialty areas such as angiography, MRI, mammography.

Prerequisite(s): RADG-230 Corequisite(s): none

## RADG 275 Radiographic Analysis II 1 cr.

In this continuation of RADG-175, students learn to critique images performed by classmates and, in addition, learn how to present case studies relative to procedures. Correlation is made between patient history, radiographic views obtained, and technical factors utilized.

Prerequisite(s): RADG-175, RADG-230

Corequisite(s): none

## RADG 290 Clinical Practicum VI 2 cr.

In this final semester, students will emphasize work in general radiography, with the opportunity to concentrate on performing all procedures on increasingly difficult patients as well as perfecting general radiographic skills, judgment and image evaluation skills.

Prerequisite(s): RADG-260 Corequisite(s): none

Radiation Therapy Courses (RDTH)

## RDTH-100 Medical Terminology

RDT-100 is an intense study of medical terminology using a system in word building with an emphasis on Radiation Oncology. Thousands of medical words can be built from Greek and Latin prefixes, suffixes, word roots and combining forms.

Prerequisite(s): RDTH program acceptance

Corequisite(s): none

RDTH-105 Introduction to Radiation Therapy 3 cr.

course introduces the student to the of fundamentals medical imaging, including radiographic imaging techniques, digital imaging, transfer and storage of medical images. An introduction to the principles of radiation therapy is discussed, including patient assessment, patient education, and pharmacology. This course provides students with the knowledge and skills to solve problems associated with radiation therapy, and to think critically when working with patients and colleagues.

Prerequisite(s): RDTH program acceptance Corequisite(s): none

## RDTH-120 Clinical Practicum I

This course introduces the student to clinical education with an intense clinical orientation including hospital orientation, field trips, boot camps, job-shadowing experiences and the role of a student in the department of radiation therapy. It serves as an introduction and provides a foundation for the student's specific role in the clinical setting. Topics such as teamwork, ethics, blood-borne pathogens, radiation protection and clinical assignments are all covered in this course.

Prerequisite(s): RDTH program acceptance Corequisite(s): none

## RDTH-135 Radiographic Anatomy I

This course is a presentation of radiographic anatomy as it pertains to the radiation therapist in general. Specific skeletal anatomy will be reviewed; emphasis will be on bony landmarks, terminology, organ reference, surface and cross-sectional anatomy.

Prerequisite(s): RDTH program acceptance Corequisite(s): none

## RDTH-140 Princ. & Pract. of Rad Therapy I 3 cr.

This course provides an introduction to radiation oncology concepts and techniques. The student examines cancer through an exploration of factors, including epidemiology, etiology, and detection. Theoretical knowledge delivered in class supports the clinical aspects of providing treatment to patients with cancer. Treatment components include simulation and treatment utilizing an anatomical site-by-site approach.

Prerequisite(s): RDTH program acceptance Corequisite(s): none

#### RDTH-160 Clinical Practicum II

This practicum course is the continuation of Clinical Practicum I. In addition to applying knowledge gained

during the first clinical practicum, students will observe and participate in the technical and clinical aspects of radiation therapy. Again, clinical-performance objectives are used to direct students to specific tasks and related information necessary in the clinical setting. Students must demonstrate competence in specific clinical activities.

Prerequisite(s): RDTH-120 Corequisite(s): none

## RDTH-165 Radiographic Anatomy II

This course is a continuation of RDTH-135, Radiographic Anatomy I. It presents radiographic anatomy as it pertains to the radiation therapist in general. Specific organ systems are reviewed with emphasis placed on specific tumors and sites.

Prerequisite(s): RDTH-135 Corequisite(s): none

4 cr.

1 cr.

4 cr.

## **RDTH-170 Radiation Physics**

4 cr.

1 cr.

This is a lecture study series dealing specifically with the physics of radiation oncology, including radiation and its properties, x-ray production, radiation quality, principles of detectors, high energy equipment, photon and electron beams and brachytherapy applications.

Prerequisite(s): RDTH-120 Corequisite(s): none

## RDTH-180 Clinical Practicum III

7 cr.

This practicum course is the continuation of Clinical Practicum I & II. In addition to applying knowledge gained during the first and second clinical rotations, students will observe and participate in the technical and clinical aspects of radiation therapy. Clinical performance objectives and case studies will be used to direct students to important clinical tasks and related information. This 10-week summer internship allows the student an opportunity to work with the patient on a daily basis, challenge their clinical skills and grow in self-confidence. Students must demonstrate competence in specific clinical activities.

Prerequisite(s): RDTH-160 Corequisite(s): none

## RDTH-210 Princ. & Pract. of Rad Therapy II 4 cr.

This senior-level course is designed to provide the learner with a foundation in cancer management. Topics such as epidemiology, etiology, pathology and the principles of radiation therapy will be discussed. Students will be introduced to concepts such as radiosensitivity, therapeutic ratio, cell cycle, time/dose relationship and specific radiation therapy equipment.

Prerequisite(s): RDTH-105 Corequisite(s): none

#### RDTH-215 Physician's Lecture Series

3 cr.

This is a lecture series presented by visiting radiation oncologists. Each of the physicians will provide students with the fundamentals of clinical radiation oncology. Malignant conditions, their etiology and methods of treatment are discussed. Attention is given to patient prognosis, treatment results and the effects of combined therapies. Case study presentations will emphasize treatment principles included in each particular tumor site, utilizing radiographic images, scans, pathology slides, etc.

Prerequisite(s): RDTH-140 Corequisite(s): none

#### RDTH-220 Clinical Practicum IV 7 cr.

The purpose of this course is twofold: 1) as a continuation of Clinical Practicums I, II, & III for entry-level students; and 2) as an orientation and first clinical rotation for those in advanced standing. Clinical performance objectives for both levels of students will be used, with a more concentrated clinical approach organized for those students in advanced standing. Entry-level students will demonstrate proficiency in common technical and clinical skills, as well as learning and refining the more technically difficult aspects of radiation therapy. Students in advanced standing will demonstrate proficiency in common technical and clinical skills.

Prerequisite(s): RDTH-180 Corequisite(s): none

## RDTH-225 Treatment Planning & Dosimetry 4 cr

Students are introduced to concepts in treatment planning and dosimetry as they apply to a radiation oncology department. Topics such as dose calculations, brachytherapy, and computer dosimetry will be discussed.

Prerequisite(s): RDTH-140 Corequisite(s): none

#### RDTH-230 Basic Clinical Dosimetry 1 cr

Clinical dosimetry has been an integral part of radiation therapy since its inception. This dosimetry course is organized and centered on the practice of clinical radiation dosimetry with the objectives of developing students' skill in quality assurance measurements, machine warm-up procedures, and brachytherapy.

Prerequisite(s): RDTH-180 Corequisite(s): none

3 cr.

This course will provide students with the principles of cell responses to radiation. Factors that influence the effects of radiation, tissue sensitivity, cell biology, interaction of radiation with matter, total body and late effects of radiation, and environmental factors are discussed. In addition, radiation protection principles are reviewed, including time, distance, and shielding.

Prerequisite(s): RDTH-140 Corequisite(s): none

#### RDTH-240 Clinical Practicum V

7 cr.

The purpose of this course is twofold: 1) as a continuation of Clinical Practicums I, II, III and IV for the entry level student; and 2) as a continuation of Clinical Practicum IV for students in advanced standing.

Prerequisite(s): RDTH-220 Corequisite(s): none

## RDTH-245 Radiation Quality Assurance Lab 1 cr.

The lab experience highlights and reinforces many of the physics and dosimetric applications of the clinic. Special emphasis is on quality assurance procedures and dose measurement as it relates to radiation therapy.

Prerequisite(s): RDTH-220 Corequisite(s): none

#### **RDTH-260 Clinical Practicum VI**

7 cr.

The purpose of this course is twofold: 1) as a continuation of Clinical Practicum I-V for the 24-month students; and 2) as a continuation of Clinical Practicums IV and V for students in Advanced Standing. Students will benefit from the summer internship by participating in patient care, providing treatment planning and delivering a planned course of radiation therapy under direct and supervision. The team approach should provide an atmosphere where students can grow in selfconfidence, precision and accuracy in delivering a planned course of radiation therapy. In addition, students shall demonstrate the following skills: 1) technical skills (quality and quantity of work); 2) dosimetric and treatment planning skills (clinical applications); and 3) nursing skills (psychological and routine nursing skills). At this level, the advanced standing student will be evaluated on overall clinical competency and a decision will be made as to whether an additional three months of clinical experience is necessary for advanced standing students only.

Prerequisite(s): RDTH-240 Corequisite(s): none

#### RDTH-280 Clinical Practicum VII

7 cr.

This practicum course is a continuation of Clinical Practicum VI and is designed for the advanced standing student. The student will focus on clinical competence, decision-making, and critical thinking related to delivering a prescribed course of radiation therapy.

Prerequisite(s): RDTH-260 Corequisite(s): none

## RDTH-295 Radiation Therapy Registry Review 1 cr.

This course is designed to prepare the radiation therapy student to take the American Registry of Radiologic Technology (ARRT) Certification Examination in Radiation Therapy. There will be a complete review of ARRT Registry content, with special emphasis on the first year material. Several "mock registries" will be provided.

Prerequisite(s): RDTH-260 Corequisite(s): none

Respiratory Therapy Courses (RESP)

## RESP 100 Respiratory Therapy Patient Care 2 cr.

This course is designed to give entry-level Respiratory Therapy students an overview of the development of respiratory therapy, its role in health care, its relationship to other health care services, and its organizational structure in the hospital environment. Also discussed will be such topics as ethics, medicallegal responsibilities of patient care (including HIPPA training), death and dying, blood borne pathogens and universal precautions, charting and generation of orders and medical terminology. Basic pulmonary anatomy and medical terminology will also be presented. Focus throughout the course will be on the patient as an individual and central figure in the complex multi-directional environment.

Prerequisite(s): Program acceptance

Corequisite(s): RESP-101

#### RESP 101 Gas, Humidity, & Aerosol Therapy 4 cr.

This course will allow students to achieve the technique, skills and understanding necessary to properly and effectively administer the three treatment modalities. The physiologic rationale, indications and contraindications will be stressed in addition to practices required for patient safety. An understanding of the physical principles defining equipment function will be required.

Prerequisite(s): Program acceptance

Corequisite(s): RESP-100

## RESP 105 Pulmonary Assessment Tech 3 cr.

This course is designed to provide students with entrylevel skills in basic chest-assessment and auscultation of breath-sound; basic interpretation of chest radiographs, pulmonary-function tests, arterial-blood gas sampling, and analysis, interpretation, and application of concepts covered in AHS-114, Cardiopulmonary-Renal Anatomy and Physiology.

Prerequisite(s): Program acceptance Corequisite(s): RESP-100, RESP-101

## RESP 110 Airway Management

3 cr.

The course is designed to provide students with the knowledge and skills needed to effectively assess and treat patients with disorders of the upper and lower airway. Knowledge and skills will be confined to the scope of practice of the respiratory-care practitioner.

Prerequisite(s): BIOL-130, BIOL-131, RESP-100, RESP-101

Corequisite(s): none

#### RESP 115 Applied Physics-Health Sciences 2 cr.

This course is designed as a general introduction to basic concepts in physics, relevant to respiratory care and cardiovascular technology. Concepts discussed will include gas laws, fluid dynamics, temperature, pressure, Newton's Laws of Motion, units of measurement and conversions, radiation safety, and biomedical monitoring.

Prerequisite(s): Program acceptance (RESP or CARD) Corequisite(s): none

#### RESP 120 Cardiopulmonary-Renal A&P 3 cr.

This course is designed to be an in-depth study of the structure and function of the cardiovascular, pulmonary and renal systems. Emphasis will be placed upon the clinical aspects of systemic function and clinical measurement of that function.

Prerequisite(s): BIOL-130, BIOL-131, RESP-100, RESP-101

Corequisite(s): none

#### RESP 125 Clinical Practicum I 3 cr.

This course is an introduction to clinical practice and hospitals affiliated with SMCC's Respiratory Therapy Program. The clinical experience will be observational, with some directly supervised task performance under guidance of the clinical instructor. Students will rotate through selected environments for four or eight hours each on a day shift one day per week.

Prerequisite(s): BIOL-130, BIOL-131, RESP-100, RESP-

101

Corequisite(s): RESP-110, RESP-115, RESP-120

## RESP 150 Microbiology for Patient Care

This course takes a survey approach to the classification, morphology, identification, and physiology of microorganisms. The major emphasis is on the clinical problems associated with infection nosocomially contracted. Some emphasis is also placed on the practical problems and techniques of the cleaning, sterilization, and utilization of contaminated equipment and clothing.

Prerequisite(s): BIOL-135, BIOL-136, CHEM-120, RESP-105, RESP-115

Corequisite(s): none

## RESP 160 Pharmacology

2 cr.

2 cr.

The general principles of drug action, methods of administration, metabolism, excretion and clinical application will be presented. Bronchoactive drug groups seen in the practice of respiratory therapy will be emphasized. Also discussed will be several drug categories (cardiovascular medications, antibiotics, neuromuscular blockers, anticoagulants and diuretics) not used directly by the respiratory care practitioner.

Prerequisite(s): RESP-105, RESP-115, BIOL-135, BIOL-136

Corequisite(s): none

## RESP 170 Intro to Mechanical Ventilation 2 cr.

This course is designed to provide students with an understanding of the fundamentals of mechanical ventilation. The focus will be placed on the way mechanical ventilators function, basic terminology, classification, technological and mathematical concepts, graphical displays and the interrelationship between pressure, volume, flow and time as related to mechanical ventilator function.

Prerequisite(s): RESP-105, RESP-110, RESP-125 Corequisite(s): RESP-150, RESP-160, RESP-170

#### RESP 175 Clinical Practicum II 4 cr.

This course is designed to give students their first direct "hands-on" performance of selected basic respiratory therapy clinical skills in the non-critical care hospital environment. Use of basic, non-critical care respiratory therapy equipment as well as basic patient assessment skills will be emphasized. Students will be assigned to 12 twelve-hour shifts with a clinical mentor.

Prerequisite(s): RESP-125, RESP-150, RESP-160, RESP-170

Corequisite(s): none

## RESP 180 Polysomnography I

The basic principles of polysomnography will be presented. Patient setup and electrode application for

3 cr.

overnight recording, the sleep history, and the technologist's assessment of the patient are discussed in detail. Determination of recording parameters, instrument settings, polysomnograph and patient calibrations are emphasized. An overview of sleep disorders is provided with emphasis on those routinely seen in sleep disorders centers. These disorders include obstructive sleep apnea, narcolepsy, periodic limb movements in sleep, and others. Methods of treatment including CPAP and surgical treatments are also discussed. The techniques of sleep staging according to the national standards of AASM Scoring Criteria are introduced in this course. Respiratory event scoring, movement and arousal scoring criteria are also outlined.

Prerequisite(s): BIOL-130, BIOL-131, program acceptance or completion

Corequisite(s): none

## RESP 200 Neonatology and Pediatrics 3 cr.

This course is designed to give Respiratory Therapy students insight into special considerations involved in the respiratory care of the neonatal and pediatric patient. Emphasis will be given to lung embryology and morphology, abnormal cardiopulmonary and congenital anomalies of the newborn and overall respiratory care of the distressed neonate. Also discussed will be respiratory disease of infancy and childhood. Particular attention will be given to the specialized equipment used to maintain, monitor, and treat the neonatal-pediatric patient.

Prerequisite(s): RESP-170, RESP-175

Corequisite(s): none

#### RESP 210 Cardiovascular Assessment 3 cr.

This course is designed for upper level Respiratory Therapy students and other Allied Health Science or Nursing students in order to present an overview of current cardiovascular diagnostic techniques. Emphasis will be placed primarily upon non-invasive techniques including electrocardiography and echocardiography, but the course will also include modules relating to therapeutic aspects of cardiac care and cardiac rehabilitation and disease prevention. Some cardiovascular pharmacology will also be presented.

Prerequisite(s): RESP-120, RESP-170 Corequisite(s): BIOL-135, BIOL-136

#### RESP 220 Clinical Mechanical Ventilation 3

This course is designed as a follow-up to RESP-170, Introduction to Mechanical Ventilation. It is designed for senior Respiratory Therapy students as a more advanced and detailed presentation of topics initially raised in the introductory course with an emphasis on

clinical applications and also the addition of an introduction to neonatal mechanical ventilation. Ventilator graphics, high-frequency ventilation, non-invasive mechanical ventilation, acute respiratory distress syndrome, lung protective strategies, newer ventilator modes and formats, airway pressure therapy and weaning from mechanical ventilation will all be studied. Laboratory sessions will focus on operating characteristics of selected mechanical ventilators as well as clinical simulations.

Prerequisite(s): RESP-170, RESP-175

Corequisite(s): none

## RESP 225 Clinical Practicum III 4 cr.

This course is a continuation of RESP-175. The development of clinical skills in the physiological assessment of the patient and care of the adult patient will be reinforced. Students will have an opportunity for observation of surgery in the Operating Room and also receive an introduction to selected critical care procedures. Students will be assigned 2 eight-hour clinical days each week. In addition, students will be introduced to some non-hospital based aspects of Respiratory Therapy such as diagnostic testing laboratories, physician medical practices, home care, and Sleep Diagnostic Laboratories.

Prerequisite(s): RESP-175 Corequisite(s): none

## RESP 250 Critical Respiratory Care 3 cr.

This class is designed to give second-year Respiratory Therapy students insight into the organization and structure of the Intensive Care Unit; included will be discussion of the roles, relationships and stresses upon the ICU health-care team. Also discussed will be infection control in, and psychological implications of, the ICU environment. Major course emphasis will center on Hemodynamic Monitoring as well as assessment and treatment of the patient with specific pathologic conditions commonly seen in the ICU. The interrelations between organ systems and disease entities in the critically ill patient will also be discussed.

Prerequisite(s): RESP-170, RESP-175, RESP-220

Corequisite(s):

## RESP 275 Clinical Practicum IV 6 cr.

This clinical course is designed to provide an in depth introduction into the role of the respiratory therapist in the Acute Critical Care setting for adult, pediatric and neo-natal patients. In addition the clinical practicum is designed to polish the skills learned in previous clinical rotations and serve overall as the final preparation for employment at the entry-level in Respiratory Therapy. Students will be assigned 3 eighthour days per week.

Prerequisite(s): RESP-200, RESP-210, RESP-220, RESP-

225

Corequisite(s): none

Sociology Courses (SOCI)

**Introduction to Sociology** SOCI 100

3 cr. Introduction to Sociology presents fundamental concepts and theories covering many areas of contemporary sociology. This course analyzes the influence of social and cultural factors upon human behavior in the areas of culture, socialization, groups, deviance, sexuality, stratification, race, gender, economics, family, religion, and the environment. Social dynamics and social institutions will be explored, coupled with the ever-present issues of social change and the impact of these changes on society and the individual.

Prerequisite(s): none

Corequisite(s): ENGL-050, ENGL-075

SOCI 160 North American Social Geography 3 cr.

Social Geography focuses on the interrelationship between sociology and geography. Students will examine how the geography of a region affects population, settlement patterns, urbanization, and cultural development. Students will participate in an interactive classroom project to explore how shaped North American social geography development. This course is offered occasionally.

Prerequisite(s): ENGL-100 Corequisite(s): SOCI-100

SOCI 190 Sociology: Service Learning 3 cr.

Service Learning is an instructional method that community service with integrates instruction. This service-training model of instruction used in sociology will focus on critical, reflective thinking, and civic responsibility, and commitment to the community. Students should develop a broader and deeper understanding of social issues through their service to the community.

Prerequisite(s): SOCI-100 Corequisite(s): none

#### SOCI 201 Marriage and Family 3 cr.

Marriage and Family covers the concepts, structure and diversity of marriage and family from a multigenerational perspective. The focus will be on the modern American family and how it interacts with contemporary society. Each student will be introduced to marriage and family through lectures and practicum. This practicum will be a problem-based learning exercise. The students will participate in a classroom marriage simulation so they can gain reallife knowledge of the personal and social interaction of a family unit in contemporary society. The history of social dynamics and institutions will be explored, coupled with social change and the impact of these changes on the individual, family and society. This course is offered Fall semester.

Prerequisite(s): ENGL-100 Corequisite(s): SOCI-100

Genocide, Societies' Shame SOCI 205 Genocide is the systematic destruction of a racial or ethnic group or culture. This course studies acts of genocide perpetrated in the 20th and 21st centuries, for example the Holocaust, Darfur and Bosnia. The course will focus on what happens to a culture experiencing genocide. Students will participate in activities that illustrate the realities of genocide and its impact on the individual and society. Topics covered include prejudice, social movement theory, collective behaviorism and group dynamics. This course is

Prerequisite(s): ENGL-100, PSYC-100 or SOCI-100

Corequisite(s): none

offered Spring semester.

#### SOCI 210 **Critical Thinking - Social Issues** 3 cr.

This course will introduce students to the concepts and skills associated with critical thinking about social issues. Topics for the semester will include educational reform, energy, and sexual behavior. The course content will include reading and thinking critically; writing concisely and with conceptual clarity; developing convincing, rational arguments to support one's views; and understanding others arguments and perspectives. It is developed with the explicit aim of preparing the student for advanced courses while becoming an active thinker and learner outside of the discipline and college. This course has been designated as a writing-intensive course.

Prerequisite(s): ENGL-100, SOCI-100

Corequisite(s): none

#### SOCI 215 The Society of the Disabled

The focus of this course is on modern Americans with disabilities, both mental and physical, and how they interact with society. Each student will be introduced to a wide range of disabilities through lectures and a practicum. This practicum will consist of problembased learning exercises. Students will participate in a classroom disabilities activity that presents real-life situations for students to explore so they can gain knowledge of the personal and social interactions of a person with disabilities in society. The history of social dynamics and institutions will be explored, coupled with the study of social change and the impact of these change on the individual and society. This course is offered occasionally.

Prerequisite(s): ENGL-100 Corequisite(s): SOCI-100

## SOCI 250 Social Theory

3 cr.

4 cr.

This course will provide an introduction to theories in Sociology. We will begin with three theorists who represent the traditional field of Sociology: Karl Marx, Max Weber, and Emile Durkheim. Additionally, the class will read and discuss the work of theorists who made significant contributions to understanding social life from metaphorical margins of society – the life of women, people of color, people living in poverty, and other disenfranchised populations. This course is offered Fall semester.

Prerequisite(s): ENGL-100, SOCI-100

Corequisite(s): none

Spanish Courses (SPAN)

## SPAN 100 Conversational Spanish 3 cr.

This course is designed for students of all levels of Spanish The course focuses on the students" ability to produce the language orally. Content begins with basics and becomes increasingly complex as the semester progresses. The course does not include explanations of grammar and all assessments are done orally. The course is intended for people who plan to use spoken Spanish in some capacity in their lives.

Prerequisite(s): none Corequisite(s): none

#### SPAN 101 Beginning Spanish I

This beginner's course in Spanish equally emphasizes the four skills of language learning: listening comprehension, speaking, reading and writing Interactive materials and a laboratory component create a multifaceted and challenging learning environment. This course is appropriate for students with fewer than 2 years of high school Spanish.

Prerequisite(s): none Corequisite(s): none

## SPAN 102 Beginning Spanish II 4 c

This course in Spanish equally emphasizes the four skills of language learning: listening comprehension, speaking, reading and writing Interactive materials and a laboratory component create a multifaceted and challenging learning environment. This course follows SPAN-101 in the course sequence and is a continuation of material covered in SPAN-101.

Prerequisite(s): SPAN-101 Corequisite(s): none

## Sport Management Courses (SPTM)

#### SPTM 105 Foundation of Sport

This course provides an extensive overview of professions within the field of sport Students will explore different value philosophies of sport and the formulation of personal & professional goals. Current and future issues and trends are examined. Students will examine the field of sport from a career orientation and build upon the observations throughout their course of study.

Prerequisite(s): ENGL-050 Corequisite(s): none

## SPTM 155 Introduction to Sport Management 3 cr.

This course will introduce students to the fundamental aspects of sport management, with a concentration on the history of sport, sport organizations and education, and the impact of sport on economics. This course will also explore the influence of sport management and the impact on society.

Prerequisite(s): SPTM-105 Corequisite(s): none

## SPTM 200 Sport Management Internship I 3 cr.

This course will introduce students to hands on practical experience in the field of sport management Students will be placed at an on-site location to develop skills learned in the classroom and developed within the professional work setting. All students will have a direct on-site supervisor to assist in the development of the professional experience.

Prerequisite(s): SPTM-155 Corequisite(s): none

## SPTM 205 Sport and Facilities Management 3 cr.

The course focuses on recreation and sport program management, with emphasis on coordination, development, implementation and evaluation of activities and programming in recreation, fitness and sports in school, community and professional levels The course also focuses on sport and recreation facility uses, trends, equipment, and physical layout. The areas of program promotion, project planning, market analysis, motivation, and adherence to standards are explored.

Prerequisite(s): SPTM-155 Corequisite(s): none

Social Work Courses (SWRK)

#### SWRK 100 Introduction to Social Work 3 cr.

This course will familiarize students with the various roles, functions, and tasks which social workers perform in a variety of settings and acquaint them with the primary skills and practices of generalist social

work Students will be introduced to social work practice as a multi-level and multi-method approach to influencing change in problem situations. Students will also be introduced to the core values and Code of Ethics of social work and be exposed to issues of diversity, oppression, and social justice. The practice of generalist social work will be considered from the perspective of a collaborative, strengths-based model working within complex social service systems.

Prerequisite(s): ENGL-050, ENGL-075

Corequisite(s): none

Welding Courses (WELD)

#### WELD 100 Introduction to Welding

This course is designed to provide the fundamentals of welding for the beginner. Students will learn to operate basic equipment pertaining to shielded metal arc welding, oxy-fuel welding and cutting. Students will also be instructed in the choice of proper electrodes. This course will be beneficial to students going into a welding career or any occupation that requires welding skills. It will also be valuable to welders as refresher or to the home hobbyist or a supervision advancement.

Prerequisite(s): none Corequisite(s): none

#### WELD 102 Introduction to Welding I 1 ci

This course is designed to provide the fundamentals of welding for the beginner. Students will learn to operate basic equipment pertaining to shielded metal arc welding, oxy-fuel welding and cutting. Students will also be instructed in the choice of proper electrodes. This course will be beneficial to students going into a welding career or any occupation that requires welding skills. It will also be valuable to welders as refresher or to the home hobbyist or a supervision advancement.

Prerequisite(s): none Corequisite(s): none

## WELD 103 Introduction to Welding II 1 cr.

This course is designed to provide the fundamentals of welding for the beginner. Students will learn to operate basic equipment pertaining to shielded metal arc welding, oxy-fuel welding and cutting. Students will also be instructed in the choice of proper electrodes. This course will be beneficial to students going into a welding career or any occupation that requires welding skills. It will also be valuable to welders as refresher or to the home hobbyist or a supervision advancement.

Prerequisite(s): none Corequisite(s): none

#### WELD 104 Introduction to Welding III

This course is designed to provide the fundamentals of welding for the beginner. Students will learn to operate basic equipment pertaining to shielded metal arc welding, oxy-fuel welding and cutting. Students will also be instructed in the choice of proper electrodes. This course will be beneficial to students going into a welding career or any occupation that requires welding skills. It will also be valuable to welders as refresher or to the home hobbyist or a supervision advancement.

Prerequisite(s): none Corequisite(s): none

3 cr.

## WELD 105 Structural Welding Theory 4 cr.

This course is designed to provide the theory of shielded metal arc welding, oxy-fuel welding and cutting. Subjects the students will cover include shop safety, welding equipment, terminology, striking the arc, metallurgy, critical temperatures, quality control, welding distortion and defects, joint design, and weld symbols. The student will be introduced to codes and standards, API, ASME, Maine State and AWS standards I.A.W. AWS D1.1, This course is designed to provide the student with the state regulations and the various certification requirements in preparation for SMAW welder certification testing.

Prerequisite(s): MATH-020 Corequisite(s): WELD-106

## WELD 106 Structural Welding Lab 3 cr.

This laboratory component is intended to provide students with experiential learning in support of concepts and principles introduced in WELD-105 Structural Welding Theory. Students will be trained in basic shielded metal arc welding, including F-3 filler stringer beads, pad weld, filet weld, all position and F-4 filler stringer bead, pad weld, filet weld, all position. Basic fuel gas operations including torch safety, oxy cutting, brazing, soldering will be covered. This course is designed to provide the student with the hands on skill in preparation for structural steel plate welder certification testing.

Prerequisite(s): MATH-020 Corequisite(s): WELD-105

## WELD 155 Advanced Welding Theory 4 cr.

Students will learn about and explore the principles of carbon arc and plasma arc cutting, welding of carbon steels, alloys of aluminum and stainless using shielded metal arc welding, flux core arc welding, gas metal arc welding, and gas tungsten arc welding to prepare for the ever changing welding environment.

Prerequisite(s): WELD-105, WELD-106

Corequisite(s): WELD-156

## WELD 156 Advanced Welding Lab 3 cr.

This laboratory component is intended to provide students with experiential learning in support of concepts and principles introduced in the WELD-155 Advanced Welding Theory. Topics include certificate preparation in groove welding to AWS D1.1 in shielded metal arc welding, flux core arc welding, and metal cored arc welding. Students will also perform basic alloy welding (stringer beads, pad welds, filet weld), advanced carbon arc cutting, plasma arc cutting, gas tungsten arc welding / tig (stringer beads, filet welds, walking the cup). Advanced students will have the opportunity to explore piping, sockets, and open root welding.

Prerequisite(s): WELD-105, WELD-106

Corequisite(s): WELD-155

# GOVERNANCE, ADMINISTRATION, FACULTY & STAFF

## **Executive Staff**

#### James O. Ortiz

President

A.A., Queensborough Community College;

B.A., Hunter College;

M.S.W. New York University;

Ed.D., Boston University

#### Janet M. Sortor

Vice President & Dean of Academic Affairs B.S., Eastern Michigan University; M.Ed., Boston University;

Ed.D., University of Massachusetts

## Diane M. Vickrey

Dean of Students & Planning Affirmative Action Officer B.A., Brooklyn College; M.Mus., Boston University; M.B.A., New York University

## Scott G. Beatty

Dean of Administration B.S., Purdue University

#### Robert D. Coombs

Dean of Finance
B.A., Tufts University;
M.A., University of Southern Maine

## **Faculty**

#### Daniel H. Abbott

Professor

Architectural & Engineering Design B.A., Swarthmore College B.S., University of Southern Maine

M.S., University of Southern Maine

## Cindy A. Almeida

Professor

Nursing

B.S.N., Rutgers University;

M.S.N., University of Southern Maine

#### Jeffrey C. Badger

Art

Instructor

Department Chair

B.A., Skidmore

M.F.A., Art Institute of Boston at Leslie College

## Barbara D. Belicose

Instructor

Nursing

A.A.S., Brookdale Community College B.A., Thomas Edison State College

M.L.S., Rutgers University

## Wilfred R. Beriau

Professor

**Culinary Arts** 

Certificate, Culinary Institute of America

A.A.S., University of Massachusetts; B.S., M.S.Ed., University of Maine

#### William F. Berman

Associate Professor

**Education & Human Services** 

B.A., Colgate University;

M.S., Ed.D., SUNY Albany

## Carla G. Birt

**Assistant Professor** 

Nursing

B.S., University of Maine, Orono

M.S., University of Phoenix

## John H. Bolduc

Assistant Professor

Department Chair

Integrated Manufacturing Technology

A.A.S., Central Maine Community College

B.S., University of Maine

#### Michael T. Bove

Instructor

English

B.A., M.A., University of New Hampshire

#### Ann H. Boyce

Assistant Professor

English

B.A., M.A., Mills College

## Janet M. Brennan

Professor

Radiography

R.T.R., Thayer Hospital, School of Radiology

A.A.S., Southern Maine Technical College

B.S., University of St. Francis

#### Jonathan S. Browne

Instructor

**Automotive Technology** 

A.A.S., Central Maine Community College

B.S., University of Southern Maine

## Robert A. Brydon

Instructor

Integrated Manufacturing Technology

## Howard M. Burnham

Division Chair, Applied Technology

Professor

Department Chair

Construction Technology

A.A.S., Southern Maine Technical College

B.S., University of Southern Maine

## Howard A. Burpee

Professor

Department Chair

Computer Technology

Diploma, Southern Maine Technical College

A.A.S., Southern Maine Technical College

B.S., University of Southern Maine

#### Craig A. Carney

Professor

Department Chair

Heating & Air Conditioning

A.A.S., Southern Maine Technical College

B.S.Ed. University of Southern Maine

Master Oil and Solid Fuel Technician

Master Plumber

Certified Propane and Natural Gas Technician

#### Hosea W. Carpenter III

Associate Professor Computer Technology

A.A.S., Southern Maine Technical College B.S., University of Southern Maine

M.S. Ed., University of New England

wis. Eas, omversity of New England

#### Florence D. Chambers

Associate Professor Mathematics

B.A., St. John's University

M.A., St. John's University

#### Molly R. Chancey

Professor

English

B.A., Tulane University

M.A., University of New Orleans

#### Larry K. Chaney

Assistant Professor

Science

B.S., University of Maine Portland

M.S., Ph.D., University of Massachusetts

## Walter C. Chop

Professor

Department Chair

Respiratory Therapy

A.S., Newberry Junior College

B.A., Sacred Heart University

M.S., University of Southern Maine

## Robert M. Coffman

Instructor

**Business Administration** 

B.S., University of Maine Farmington

M.B.A., University of Southern Maine

#### Meridith L. Comeau

Associate Professor

Department Chair

Architectural & Engineering Design

B.A., University of Maine

A.A.S., Southern Maine Technical College

#### Ronald D. Cote

Professor

Mathematics

A.A.S., Southern Maine Voc Technical Institute

B.S., University of Southern Maine

#### Sally A. Doe

Professor, Department Chair

Radiography

R.T.R., Maine Medical Center School of

Radiography Technology

B.S., University of Southern Maine

M.S., University of Southern Maine

## David A. Eng

**Assistant Professor** 

Construction Technology

B.S., University of Southern Maine

## James D. Feeney

Professor

**Electrical Engineering Technologies** 

CET

Master Electrician (Maine)

1st Class FCC License

A.A.S., Southern Maine Vocational Technical

Institute

B.S.EE., University of Maine

## Vincent J. Ferguson

**Assistant Professor** 

Heating, Air Conditioning, Refrigeration &

Plumbing

Maine Licensed Natural Gas & Propane Technician

Master License Oil & Solid Fuel Board of Maine

Certificate Certified Universal C.F.C.

Master Electrician

#### April M. Fey

Instructor

Nursing

B.S., Fitchburg State College

M.S., University of Kentucky

#### Edward L. Fitzgerald

Professor

Architectural & Engineering Design

A.A.S., Southern Maine Vocational Technical Institute;

A.A.S., Southern Maine Technical College;

B.S., University of Southern Maine

#### Kenneth D. Fryover

Professor

Program Director

Plumbing

App-4

B.S. Ed., University of Maine

#### Susan H. Garrett

Assistant Professor Nursing B.S.N., University of Maine M.S.N., University of Southern Maine

#### Lynn E. Golder

Instructor Nursing

A.S., Mohawk Valley Community College B.S., M.S.N., State University of New York Institute of Technology at Utica/Rome

#### Valerie B. Green

Instructor
Communications & New Media
B.A., M.S., Brown University

#### Charles J. Gregory

Professor Science B.S., University of New England M.S., Ph.D., University of Maine

#### Rachel A. Guthrie

Instructor Communication & New Media B.F.A., Southern Maine University M.Ed., Goddard College

#### Gregory C. Hanscom

Division Chair, Public Safety Assistant Professor, Department Chair Criminal Justice B.S., M.P.A., University of Maine

#### Dana M. Hardacker

Assistant Professor Social Sciences B.S., M.S., Cameron University M.A., Midwestern State University

#### Amy L. Havel

Assistant Professor English B.A., Colby College M.A., Illinois State University

#### Robert M. Hawkes

Division Chair, Health Sciences
Associate Professor
Department Chair
Emergency Medical Services
EMT-P, Northeastern University
B.S., B.A., University of Southern Maine;
M.S., University of New England

#### Karlee S. Hoecker

Assistant Professor Social Sciences B.A., University of Southern Maine Ph.D., University of North Carolina at Greensboro

## Christopher D. Hoffmann

Professor Science Department B.A., Boston College M.S., Antioch - New England

#### Nina G. Huntington

Instructor, Department Chair Medical Assisting A.S., Front Range College B.A., University of Connecticut B.S., Metropolitan State College

## Thomas P. Joyce

Assistant Professor Criminal Justice A.A.S., Southern Maine Technical College B.S., University of Southern Maine M.S., University of New England

#### Lisa D. Keenan

Assistant Professor Nursing B.S., M.S., University of Southern Maine M.S., University of Southern Alabama

## Kevin D. Kimball

Assistant Professor Mathematics/Physics B.S., University of New York-Regent's College

## Earl B. Lamoreau, Jr.

Professor Mathematics/Physics B.S., University of Maine

#### Paul M. Laslie

Assistant Professor Construction Technology A.A.S., Wentworth Institute of Technology B.S., University of Southern Maine

#### Dennis T. Leaver

Professor, Department Chair Radiation Therapy Certificate Harvard Medical School A.A.S., Rhode Island Junior College B.S., University of Southern Maine M.S., University of Southern Maine

#### Maurice S. Leavitt

Associate Professor Culinary Arts A.O.S., Culinary Institute of America B.S., University of Illinois-Urbana/Champaian

#### Mark A. Legel

Assistant Professor Integrated Manufacturing Technology Certified Welding Inspector B.S., University of Southern Maine

#### Joyce E. Leslie

Professor Department Chair Academic Achievement Center B.A., Slippery Rock University M.S., Florida State University

## David A. Libby

Professor Culinary Arts

A.A.S., Southern Maine Vocational Technical Institute:

A.A.S., Southern Maine Technical College; B.S.Ed, M.S.Ed., University of Southern Maine

#### Robert A. Lindstedt

Instructor Fire Science

B.S., University of Southern Maine

# Karen L. LoCascio Assistant Professor

Nursing B.S.N., University of the State of New York M.S.N., University of Southern Maine

#### Mark A. Lundv

Professor

Department Chair

**Electrical Engineering Technologies** 

Master Electrician (Maine)

Professional Engineer (Maine)

A.A.S., New Hampshire Vocational Technical College;

B.S., University of Maine

#### Jesse Z. Mase

Professor

**Mathematics and Physics** 

B.S., Massachusetts Institute of Technology

M.A., University of California Berkeley

#### William B. McClaran

Professor

Criminal Justice

B.S., Michigan State University
M.Ed., University of Southern Maine

#### Karen A. McDonald

Instructor

Respiratory Therapy

B.S., State University of New York Health Science Center

M.S., University of Pittsburgh

#### James E. McGhee

Instructor

Electrical Engineering Technologies

A.A.S., Hocking Technical College

B.S., Ohio University

#### David J. McLean

Instructor

Fire Science

A.A.S., Southern Maine Community College B.S., University of Southern Maine

#### Joyce A. Menges

Professor

Mathematics

A.A., University of Maine - Augusta

B.A., University of Maine - Fort Kent

M.S.A.Ed., University of Southern Maine

## Eben S. Miller

Associate Professor

Social Sciences

B.A., Bates College

Ph.D., Brandeis University

#### Linda F. Misener

Associate Professor

Mathematics

B.A., University of Virginia

M.S., University of Virginia

#### Daniel P. Moore

Assistant Professor

Science

B.A., University of Oregon

M.A., Graduate Institute of St. John's College

Ph.D., Massachusetts Institute of Technology

#### **Ruth Morrison**

Assistant Professor

Transportation Technology

A.A.S., Central Maine Community College

B.S., University of Southern Maine

ASE certified master automotive technician

L-1 certified advanced engine performance

technician; Former Ford senior master technician

## Michelle J. Neujahr

Instructor

**Business Administration** 

B.A., University of Minnesota

## John M. Ney, III

Professor

Department Chair

Science

B.S., University of Maine

#### Louise C. Ouellette

Professor

Radiography

R.T.R., Maine Medical Center

A.A.S., Southern Maine Technical College

B.S., University of Southern Maine

#### David L. Palm

Instructor

Horticulture

B.S., Iowa State University

M.Ed., University of Wisconsin-LaCrosse

#### Louise A. Parise

Professor

Mathematics

B.S., University of Maine-Farmington

M.S.Ed., University of Southern Maine

#### Clinton C. Pearson

Assistant Professor

**Business** 

B.B.A., University of Memphis

J.D., Stetson University

#### Cecelia B. Peaslee

Professor

Science

A.A.S., Eastern Maine Vocational Technical

Institute;

B.S., University of Southern Maine

M.S., University of Southern Maine

#### Terri R. Petnov

Professor, Department Chair

Early Childhood Education

B.S., University of New Hampshire

M.S.Ed., Wheelock College

#### Elizabeth L. Pettit

Assistant Professor

Nursing

A.A.S., B.S., M.S.N., Morehead State University

## Crystal I. Pietrowicz

Instructor

Science

A.A., Community College Air Force, Maxwell AF

A.A.S., Arkansas NE College

B.A., University of Southern Maine

M.S., University of Southern Maine

Ph.D., Boston College

#### Richard P. Pitre

Assistant Professor

**English** 

B.A., Fairfield University

M.A., Fordham University

#### Wendy M. Plourde

Assistant Professor

Computer Technology

A.A.S., Southern Maine Technical College

B.S., University of Southern Maine

M.S.Ed., University of New England

#### Anthony A. Poulin

Assistant Professor

Department Chair

**Culinary Arts** 

A.A.S., B.S., New Hampshire College

M.S. Ed., St. Joseph's College

#### Sally M. Powers

Associate Professor

Nursing

B.S.N., University of Maine - Portland/Gorham

M.S.N., University of Southern Maine

#### David T. Pratt

Professor

Computer Technology

B.A., Ricker College

## Mark R. Reuscher

Assistant Professor

**Business Administration** 

B.B.A., St. Bonaventure University

M.B.A., Syracuse University

#### Penelope A. Rice

Associate Professor Nursing B.S., University of Southern Maine M.S., California State University

#### Cheryl E. Rich

Associate Professor, Department Chair Horticulture A.A.S., Southern Maine Technical College B.S., University of Vermont M.S., University of Illinois

# **Tom Richardson, III**Division Chair, Arts & Sciences

Associate Professor
Department Chair
Education & Human Services; Liberal Studies
ETEP, University of Southern Maine
B.A., Boston University
M.A., Edmund S. Muskie School of Public Service University of Southern Maine

#### Katherine H. Roy

Instructor
Respiratory Therapy
A.S. Midlands Technical College
B.S. University of Southern Maine

#### Kate Q. Sibole

Associate Professor Communications & New Media B.A., University of Delaware B.F.A., University of Delaware M.F.A. School of Visual Arts

## Nancy E. Smith

Professor
Department Chair
Nursing
B.S.N., University of Rhode Island
M.S., University of Southern Maine

## Mildred A. Spain

Professor

Computer Technology
A.A.S., Southern Maine Vocational Technical
Institute;
B.S., University of Southern Maine

#### David R. Stankiewicz

Instructor
English
B.A., Gordon College
M.A., Andover Newton Theological Seminary
M.F.A., University of Southern Maine

#### Stephen A. Strand

Assistant Professor, Department Chair Business Administration B.S., University of Maine, M.B.A., Suffolk University C.P.A.

#### William A. Sutton

Professor Department Chair Social Sciences A.A.S., Southern Maine Technical College B.A., Earlham College M.A., University of Cincinnati

## Kevin F. Sweeney

Professor
Department Chair
English
B.A., California State College
M.F.A., University of Massachusetts

Assistant Professor, Department Chair

#### Brian P. Tarbox

Assistant Professor Science B.S., Nasson College M.S., University of Maine

#### Richard A. Thomas, II

Transportation Technology
A.A.S., Eastern Maine Vocational Technical
Institute
B.S., University of Southern Maine
M.Ed., University of Maine
ASE certified master automotive technician
L-1 certified advanced engine performance
technician
Former Chrysler master technician

## Keith R. B. Trafton

Instructor
Integrated Manufacturing Technology

#### Ingrid R. Vail

Associate Professor Early Childhood Education B.S., California State University - UCLA M.A., California State University - Northridge

#### Jan E. Veinot

Professor Social Sciences B.A., University of Southern Maine M.S., University of Southern Maine

#### Robert C. Vettese

Assistant Professor English B.A., University of Michigan M.A., City College, CUNY

## Randolph H. Visser

Professor Communications & New Media B.S., Grand Valley University

#### Eric A. Wellman

Instructor Emergency Medical Services NREMT-P, National Registry of EMTs B.S., University of Southern Maine

#### Lorna J. West-Rhinebolt

Associate Professor
Department Chair
Dietetic Technology
A.A.S., Southern Maine Technical College
B.S., M.S., University of Southern Maine

#### Norma L. Willis

Assistant Professor
Department Chair
Cardiovascular Technology
A.S., Southern Maine Technical College
RDCS registration American Registry Diagnostic
Medical Sonographers
B.S., University of Southern Maine

## Stephen D. Willis

Professor

Department Chair

Fire Science

A.A.S., Southern Maine Vocational Technical Institute

B.S., University of Southern Maine M.P.A., University of Maine

#### Naomi A. Wilson

Professor

Nursing

B.S.N., University of Maine - Portland/Gorham

M.S.N., University of Texas – Austin

## **Emily S. Woods**

Division Chair, Information, Technology, Mathematics and Business Associate Professor Mathematics B.A., Southwest Baptist College

M.A., Ph.D., New Mexico State University

#### Gerard V. Zarrilli

Professor English

B.A., University of Massachusetts-Amherst M.A., Brown University

## Staff

## Academic Affairs Staff

#### Janet M. Sortor

Vice President & Dean of Academic Affairs B.S., Eastern Michigan University M.Ed., Boston University Ed.D., University of Massachusetts

#### Howard M. Burnham

Division Chair, Applied Technology Professor Department Chair Construction Technology A.A.S., Southern Maine Technical College B.S., University of Southern Maine

#### Paul J. Charpentier

Associate Dean of Academic Affairs CCE, CEC, A.O.S. Culinary Institute of America B.S., University of Southern Maine M.S.Ed., University of Southern Maine

## **Margie Fahey**

Associate Dean for Curriculum Design & Articulation B.A., Boston College M.Ed., Tufts University

#### Staci L. Grasky

Associate Dean of Information & Enrollment Services/Registrar B.A., Mercyhurst College M.B.A., University of Massachusetts

## **Gregory C. Hanscom**

Division Chair, Public Safety Professor Department Chair Criminal Justice B.S., University of Maine M.P.A., University of Maine

#### Robert M. Hawkes

Division Chair, Health Sciences Associate Professor Department Chair Emergency Medical Services EMT-P, Northeastern University B.S., B.A., University of Southern Maine M.S. University of New England

#### Joyce E. Leslie

Professor Department Chair Academic Achievement Center B.A., Slippery Rock University M.S., Florida State University

#### Tom Richardson, III

Division Chair, Arts & Sciences
Assistant Professor
Department Chair
Education & Human Services; Liberal Studies
ETEP, University of Southern Maine
B.A., Boston University
M.A., Edmund S. Muskie School of Public Service University of Southern Maine

#### Robert A. Weimont

Associate Dean
Bath Campus and Extension Centers
B.A., Colby College
M.Ed., University of Maine

## **Emily S. Woods**

Division Chair, Information, Technology, Mathematics and Business Associate Professor, Department Chair Mathematics B.A., Southwest Baptist College M.A., Ph.D., New Mexico State University

## Student Services Staff

#### Diane M. Vickrey

Dean of Students & Planning Affirmative Action Officer B.A., Brooklyn College M. Mus., Boston University M.B.A., New York University

#### Sharon L. Bannon

Director of Career and Transfer Services B.A., Bethany College M.S.Ed., University of Southern Maine

## Tiffanie L. Bentley

Director of Student Life

B.S., M.S., Oklahoma State University

## Mark A. Krogman

Associate Dean of Students B.A., University of Pennsylvania M.S.W., University of Pennsylvania L.C.S.W.

#### **Amy Lainoff**

Director of General Studies Advising & Veterans Affairs B.A., SUNY at Cortland M.A., George Washington University

#### Shane D. Long

Director of Student Development and Engagement B.A., University of Maine, Farmington M.S., Northeastern University

#### Michel F. Lussier

Director of Financial Aid B.A., Anna Maria College

#### Sandra E. Lynham

Academic Success Coordinator

B.A., Colby College

M.S.Ed., University of Southern Maine

#### Matthew N. Richards

Director of Athletics and Recreation B.S., Colby-Sawyer College M.A., University of Northern Colorado

#### Rebecca A. Roak

Assistant Director of Recreation & Athletics B.S., University of Maine at Farmington M.S., Old Dominion University

#### Vicki - Rose Siegel

Resident Director B.A., University of Southern Maine M.B.A., Franklin Pierce University

## **Administrative Staff**

#### Sharon L. Bannon

Director of Career & Transfer Services B.A., Bethany College M.S., University of Southern Maine

#### Tiffanie L. Bentley

Director of Student Life

B.S., M.S., Oklahoma State University

#### Paul J. Charpentier

Associate Dean of Academic Affairs CCE, CEC, A.O.S. Culinary Institute of America B.S., University of Southern Maine M.S.Ed., University of Southern Maine

#### Julie A. Chase

Assistant Dean
Business & Community Partnerships
B.S., University of Maine - Farmington

#### Jeremy J. Dill

Director of Student Records & Registration B.A., M.A., University of Maine

#### Kathleen E. Doan

Director of Enrollment Services B.A., University of Southern Maine M.S., University of Southern Maine

#### Lisa C. Dolan

Director of Technology Integration & Reporting A.A.S., A.A., Southern Maine Technical College

#### Carin E. Dunay

Head, Access & Collection Services B.A., SUNY Purchase MLIS, Univ. of South Carolina

#### Margie Fahey

Associate Dean for Curriculum Design & Articulation B.A., Boston College M.Ed., Tufts University

## Margaret E. Frigard

Director of Spring Point Children's Center B.S., University of New Hampshire – Durham M.S., Wheelock College, Boston

#### Mark L. Gallup

Director of Environmental Health & Safety Geol. E., Colorado School of Mines

#### Staci L. Grasky

Associate Dean Information & Enrollment Services/Registrar B.A., Mercyhurst College M.B.A., University of Massachusetts

#### Kimberly L. Gray

Student Financial Aid Counselor B.A., St. Joseph's College

#### William F. Guindon, Jr

Director of Maine Fire Training & Education *B.S., Colorado Christian University* 

#### Frank H. Hammond, Jr.

Fire Program Training Manager, MFT&E A.S., Southern Maine Community College

#### Mark A. Krogman

Associate Dean of Students B.A., University of Pennsylvania; M.S.W., University of Pennsylvania L.C.S.W.

#### **Amy Lainoff**

Director of General Studies Advising & Veterans Affairs B.A., SUNY at Cortland M.A., George Washington University

#### Jodie E. Lane

Enrollment Services Coordinator/Recruiter B.A., SUNY at New Platz

#### Joanne E. Langerman

Patron Services Librarian
B.F.A., Fashion Institute of Technology
M.L.S., Southern Connecticut State University

#### Wendy L. Laverdiere

Assistant Director, Financial Aid A.A.S., Southern Maine Technical College

#### William E. Leighton

Education Coordinator Fire Science Fire Education & Life Safety Education Coordinator

#### Laura E. Libby

Executive Assistant to the President A.A.S., Southern Maine Technical College

#### Shane D. Long

Director of Student Development & Engagement B.A., University of Maine, Farmington M.S., Northeastern University Graduate Certificate, Kansas State University

#### Michel F. Lussier

Director of Financial Aid B.A., Anna Maria College

## Sandra E. Lynham

Academic Success Coordinator
B.A., Colby College
M.S.Ed., University of Southern Maine

#### Edward R. Marks

Deputy Fire Administrator, MFT&E

A.S., Southern Maine Vocational Technical Institute;

B.S., M.S., University of Southern Maine

#### Walter A. Morris

Fire Training Program Manager
A.A.S, Rockland Community College
B.S., Mercy College
M.S., John Jay College of Criminal Justice

## Jami L. Murphy

Resident Director B.S., Endicott College M.Ed., Endicott College M.Ed., Boston University

## Susan R. Nester

Head of Reference & Library Instructional Services B.A., University of Massachusetts MLIS, Simmons College

#### Randi L. Paine

Enrollment Services Coordinator B.A., University of Maine

## Anna S. Patkus

Language Coordinator
A.A., B.A., University of Southern Maine
M.A., School for International Training

## Denise M. Reny

Human Resources & Benefits Manager A.A.S., A.A., Southern Maine Technical College B.A., University of Southern Maine

## Amy L. Reynolds

College Relations Assistant B.A., Keene State College

#### Matthew N. Richards

Athletics Director
B.S., Colby-Sawyer College
M.A., University of Northern Colorado

#### Peter L. Rines

Curriculum & Certification Manager, MFT&E A.S., Southern Maine Technical College

## Rebecca A. Roak

Assistant Director of Recreation & Athletics B.S., University of Maine at Farmington M.S., Old Dominion University

#### Michael J. Roy

Associate Director of Financial Aid B.S., Embry-Riddle Aeronautical University

#### Joyce F. Schmitt

Advancement Assistant B.S., Bentley University

#### Vicki-Rose Siegel

Resident Director

B.A., University of Southern Maine

M.B.A., Franklin Pierce University

#### Odilia M. Silveira-Harmon

Enrollment Services Coordinator
A.S., Community College of Rhode Island
B.S., University of Rhode Island

## Andrew T. Smaha

Assistant Dean, Conferences & Special Programs *B.A., Tufts University* 

#### Brvan C. Strniste

Reference & Instructional Services Librarian B.S., Southern Connecticut State University M.L.S., Long Island University

#### Robert A. Weimont

Associate Dean
Bath Campus and Extension Centers
B.A., Colby College
M.Ed., University of Maine

#### Susan S. Williams

Director of School-College Partnerships B.A., University of Connecticut M.S.Ed., University of Southern Maine

## Support Staff

#### Diane L. Aceto

Accounting Assistant I

#### El-hadi Adam

Custodian II

#### Gregory S. Allain

College Safety & Security Officer
A.S., Southern Maine Technical College
A.S., Hesser College

#### Michelle Anderson

Accounting Assistant II

#### Elizabeth C. Arsenault

Academic Coordinator
A.A.S., Southern Maine Technical College
B.A., University of Maine

#### Kristen G. Baker

Administrative Specialist III A.A.S., Thomas College

#### Timothy E. Barnes

**Data Communications Technician** 

#### Leslie S. Barteaux

Planning & Research Assistant B.S., Guilford College

#### Charles R. Berry

Copy Center Coordinator
A.S., Southern Maine Community College

#### Patricia A. Boissonneault

Central Services Worker

#### Beth A. Borowski

Administrative Coordinator *B.A., Luther College* 

#### Justin D. Boss

Educational Assistant II B.A., University of Southern Maine

#### Albert D. Broy

Custodian II

#### Cherie D. Bryant

Manager, College Bookstore

#### Sarah M. Campbell

Administrative Specialist III
A.S., Southern Maine Community College
B.S., University of Southern Maine

#### Cecile M. Chapin

Accounting Assistant II B.S., University of Maryland

#### D. Michael Cheney

Central Services Supervisor
B.S., Southern New Hampshire University

#### Cassandra D. Cichon

Child Care Teacher

A.A.S., Southern Maine Community College

#### Chad A. Cichon

**HVAC** Technician

## Richard L. Cooper

Accountant II

#### Maria J. Corey

Accounting Assistant II
A.A.S., Southern Maine Community College

#### Alice F. Cousins

Child Care Teacher B.S., University of Southern Maine M.S. Ed., Wheelock College

## Robert F. Crangle

Custodian II

## Michael A. Cyr

Information Systems Specialist III
A.S., Northern Maine Vocational Technical Institute
B.S., Thomas College

#### Joan M. DeCosta

Accountant II

A.S., Southern Maine Community College B.A., Cornell University M.S., University of Oregon

#### Doug A. Delano

Custodian I

## Dorraine W. Diebold

Assistant Bursar/Accountant II B.A., University of Maine M.A., University of Southern Maine

#### Katharine R. Duchette

College Store Assistant II B.A., Simmons College

#### James D. Duddy

Administrative Specialist III A.S., Casco Bay College

#### David W. Dwinal

Seasonal Grounds & Equipment Laborer II
A.S., University of Maine – Augusta

#### David S. Dyro

**HVAC** Technician

### Kimberly A. Farnham

Administrative Specialist III
A.A.S., Southern Maine Community College

## Gayle M. Felker

Administrative Coordinator

#### Peggy S. Fleury

Administrative Specialist III

#### Timothy S. Folland

Facilities Maintenance Specialist I

#### Cheryl E. Fox-Briggs

Administrative Specialist III

#### J. Robert Gallant

Flectrician II

#### Brandon J. Glenn

Information Systems Specialist III B.A., University of Southern Maine

## **Diego Gonzalez**

Administrative Specialist III

B.A., University of Massachusetts, Amherst

#### Karen L. Gordon

Educational Assistant II
A.A.S., Southern Maine Technical College

#### Hafizullah Habibzai

Facilities Maintenance Specialist I

#### Brian P. Hamel

Administrative Specialist III A.A.S., Andover College

#### Patrick R. Haviland

Administrative Specialist III

#### Gregg M. Hoover

Carpenter/Painter
A.S., University of Maine

#### Floydzell E. Johnson

Custodian I

### Joseph R. Jones

Custodian II

#### Linda A. Krummell

Administrative Specialist III

#### Gerald G. Laughlin

Custodian II

#### Travis J. Lawson

Administrative Specialist III

A.A., Southern Maine Community College

#### Daniel J. Layton

Master Carpenter

#### Nicole M. Leclerc

Facilities Maintenance Specialist I A.S., Keene State College B.A., Keene State College

#### Deborah J. Leighton

Administrative Specialist III

#### Thomas J. Long

Laboratory Manager
A.A.S., Southern Maine Technical College

#### Philip H. Lowell, Jr.

Custodian I

#### Martin S. Malone

Custodian II

#### **Sharon May**

Administrative Specialist III

A.A.S., Broome Community College

#### James K. McCormack

Custodian II

B.A., Skidmore College

### William D. McGuiggan

Custodian II

## Lisa R. McLeod

Information Systems Specialist III
A.A.S., Southern Maine Technical College

Thomas D. McVey

Information Systems Specialist III A.A.S., Southern Maine Technical College

Frank H. Moreau

Facilities Maintenance Specialist I

John M. Mosey

**Programmer Analyst** B.A., Northeastern University

Joseph P. Morin

Custodian I

Robert J. Morrissey

Facilities Maintenance Specialist II

Diane P. Mulligan

Administrative Specialist III A.S., McIntosh College

Chervl L. Nason

Administrative Specialist III

Carrie G. Rose

Academic Coordinator B.A., University of Southern Maine

Thomas M. Rumery

Custodian II

Diane M. Scott

Administrative Coordinator

Cheryl A. Serfes

Accountant I

Timothy J. Slane

Custodian IV

Terrence A. Smith

Maintenance Mechanic

Susan M. Stewart

Administrative Specialist III B.A., Rosemont College

Renford R. Thomas

Custodian II

Scott R. Thibodeau

Accountant II

A.A.S., Andover College

B.S., Husson College

Ann R. Turner

**Administrative Secretary** 

A.A.S., Southern Maine Technical College A.A., Southern Maine Community College

B.S., University of Southern Maine

Leah M. VonderHaar

**Payroll Coordinator** A.S., Southern Maine Community College

George E. Ward III

Custodian II

B.S., University of Southern Maine

Patricia M. Watts

College Store Assistant I

Robert A. Williams

Facilities Maintenance Specialist I

W. Owen Wood

Information Systems Specialist III

Karen B. York

Accounting Assistant II

A.S., Husson College

# **Supervisory Staff**

#### Irene M. Finch

Business Manager II/College Bursar A.S., Beal College B.S., M.B.A., University of Maine Orono

### Bruce S. Garland

**Facilities Maintenance Supervisor** 

#### Shaun M. Gray

Director of Budget & Financial Reporting B.B.A., University of Notre Dame

### Nancy M. Lounsbury

College Safety & Security Manager

#### Joseph P. Manhardt

Security and Contract Services Manager A.A.S., Southern Maine Community College

### Kenneth L. Reno, Jr.

Information Systems Support Manager A.A.S., Southern Maine Technical College

#### James F. Reny

Facilities and Project Manager

## Kelley M. Sprague

Manager

McKernan Center

A.S., Southern Maine Technical College

B.S., Champlain College

# **ADVISORY COMMITTEES**

# **Academic Program Advisory Committees**

Architectural & Engineering Design Advisory Committee

Scott Benson, AIA

**SMRT** 

Jim Landau, PE

**SMRT** 

Kris Carlsen, PE

Woodard & Curran

James Reben

Designer

Architectural Image Solutions, LLC

Pat Conley

Director

Personnel Admin & Employee Development

Bath Iron Works

Mark Tracy, PE

Stantec

Ken "Chip" Faulter

Designer Resource & CM/DM Manager

BIW

Andrew Williams, PE

TRC

Automotive Advisory Committee

Tom Anthony

AAA Car Care Center

Mark Arsenault

Portland Volvo

Sam Barringer

Southern Maine Community College Alumnus

Morong Falmouth

Tom Brown

Executive Vic e President

Maine Automobile Dealers Association

**Doug Carter** 

Carter's Auto Service

**Chris Dalphonse** 

Maine Mall Motors Subaru

**Ernie Darrow** 

Southern Maine Community College Alumnus

Mazda

North American Operations

Mansfield Training Center

Mark Duval

**Duval's Service Center** 

**George Dykstra** 

**Automotive Youth Education Systems** 

State Manager for Maine, New Hampshire, &

Vermont

**Bob Herbeck** 

Bill Dodge Auto Group

Steve Jackson

Prime Motor Group Nissan

**Brian Jeffers** 

Prime Saco Honda

Justin Koelker

Southern Maine Community College Alumnus

Prime VW

John Mallia

Bill Dodge Auto Group

**Bob & Bonnie Merrill** 

Horsepower Automotive

**Eric Muchemore** 

Prime Toyota

**Mark Pelkey** 

New England Transmission

**Steve Piper** 

Maine Automobile Dealers Association

Robert Pederson

Prime Hyundai

**Gary Pouliot** 

Lee Auto Mall Westbrook

**Jamie Purdy** 

O'Connor Motor Company

Rick Roy

Patriot Subaru

**Mark Stevens** 

**Quirk Chevrolet** 

**Carter Waldren** 

Westbrook Regional Vocational Center

**Chris Walsh** 

AAA Car Care Center

John Williams

Chair of the Advisory Committee

Jolly John Auto City

John Wolstenhulme

Maine Mall Motors Honda

## Cardiovascular Technology Advisory Committee

Crystal Blake-Parlin, RDCS, RVT Maine General Medical Center

## Dennis Atherton, RDCS, RRT, RCVT, FASE

Maine Medical Center

#### Bill Epperly, RDCS

#### Robert Groom, CCP

Department of Cardiac Surgery Maine Medical Center

#### Ann Hall

Director of Invasive Cardiology Maine Medical Center

## Michael Harriman, RCIS

Cardiac Cath Lab Maine Medical Center

#### **Gary Harmon**

Manager Clinical Engineering Maine Medical Center

### Mirle Kellett, MD, FACC

Chief of Cardiology
Maine Medical Center

#### Kevin McGovern

AVP Cardiac Services
Maine Medical Center

#### Norma Meehan

Department of Cardiac Surgery Maine Medical Center

#### Stephen Moon, BS Ed

### Chris Nhonh, RCIS

Cardiac Cath Lab Maine Medical Center

#### Ann Paquet, RDCS

Lead Echo Tech

Southern Maine Medical Center

### Anthony Rampersaud, PhD

Pharmacy

Maine Medical Center

#### Michelle Wade, RRT, RDCS, RDMS

## Louise Wheeler, RDCS

Lead Echo Tech

Frisbee Memorial Hospital

## Communications and New Media Advisory Committee

#### **Dave Beane**

Video Tech Dept.

Portland Arts & Technology High School

#### Rich Brooks

President, Flyte New Media

#### Jeffery Cobbett

Southern Maine Community College Alumnus Web & IT Assistant

Vreeland Marketing & Design

## **Greg Gadberry**

Assistant Director
The Maine Film Office

#### Glenn Gilman

Southern Maine Community College Alumnus Web Master WOW Pages

#### Suzanne Goucher

President & CEO

Maine Association of Broadcasters

### **Andy Graham**

President/Owner, Portland Color

#### **Judy Katzel**

President, Burgess Advertising & Marketing

#### James LaPlante

President

Sputnik Animation

### **Geoffrey Leighton**

President

Leighton Images

#### John Olore

Former student, Freelance designer

#### Dan Routh

Senior Art Director Kemp Goldberg

#### **Chris Sweet**

Executive Producer
"Maine Experience"
Maine Public Broadcasting Network

#### **Steve Thaxton**

President / General Manager WCSH 6

# Computer Technology Advisory Committee

## Joseph Harlow

IT Manager

**National Semiconductor** 

## Greg Melhorn

OS and DB Department Manager Tyler Technologies

#### R. Patrick Miele

CEO, Miele Consulting

### **Dale Shaw**

CIO, Mercy Hospital

#### **Linda Smith**

Executive Assistant to the President Goodall Hospital

## **Charles Welty**

Chair, Computer Science Department University of Southern Maine

Construction Advisory Committee

**Brian Barry** 

**Dragon Cement** 

John Kuell

Northern NE Concrete Promotion Association

Sheridan Bond

Bond Brothers Lumber & Hardware

**Rusty Brewer** 

M.R. Brewer Fine Woodworking

John Butts

Associated Constructors of Maine, Inc.

**Matt Cook** 

Allied-Cook Construction, Inc.

Dan Cote

MEMIC

**Dean Farwell** 

Dean Farwell, Inc.

Linda Gagne

Gagne & Son

Peter Lachance

Lachance Brick Co.

Jim Langford

Langford & Low

**Vincent Neault** 

**Provident Concrete Products** 

Jonathan Smith

**Great Falls Builders** 

**Rod Stanley** 

MEMIC

**Dale Storey** 

Hancock Lumber

# Criminal Justice Advisory Committee Lisa Beecher

Chief

USM Police Department

## Michael Bussiere

Chief

Lewiston Police Department

## **Chance Dodge**

Branch Manager Securitas Security Services USA, Inc.

## **Edward Googins**

Chief

South Portland Police Department

## Mark Westrum

Colonel

Two Bridges Regional Jail

Culinary Arts/Hospitality Management Advisory Committee

**Douglas Armstong** 

**PATHS** 

**Stanley Bennett** 

Oakhurst Dairy

Patrick Britten

SYSCO of Northern New England

**Chris Caprara** 

Caprara Food Service Equipment

**Jack Crawford** 

Maine Course Hospitality Group

**Greg Dougal** 

Maine Innkeepers Association

**Kevin Fallen** 

Personal Touch Catering

**Gerald Giberson** 

DHS, Sanitation Dept.

**Gerry Goulet** 

Maine Medical Center

**Richard Grotton** 

Maine Restaurant Association

Charles Izzi

Capitol Area Technical Center

**Fred Joncas** 

Northcenter Food Services

Robert Jordan

Northcenter Food Services

Chris Merriam

Portland Marriott at Sable Oaks

Robert Milliken

**New England Coffee** 

**Greg Otterbein** 

SYSCO of Northern New England

Lynn Pressey

Stage Neck Inn

Sean Riley

Maine Course Hospitality Group

Sean Ryan

Native Maine Produce

**Brian Sawyer** 

Senator Inn

**Gary Sheldon** 

SYSCO of Northern New England

Vaughn Stinson

Maine Tourism Association

**Tom Taliento** 

Northcenter Food Services

Mr. David Tourin

David's 388 Restaurant

**Beau Burns** 

Chef De Cuisine

David's 388

**Kelly Price** 

Sous Chef, David's 388

Patrick Britten

Sysco of Northern New England

Michael Janosek

**Schwanns Foods** 

Frank Curty

Swiss Army and Victorinox Cutlery

Paul J. Charpentier

Assistant Dean of Academic Affairs Southern Maine Community College

# Dietetic Technology Advisory Committee Jennifer Wilson, MS, RD, LD

Brighton Medical/MMC Campus Clinical Nutrition Manager SMCC Adjunct Faculty

#### Karen Mueller, DTR

Hawthorne House Food Service Director Clinical Nutrition Manager

#### Sue Cobb, DTR

Maine Medical Center Preceptor, Acute Clinical Care SMCC DT Program Graduate

#### Kathy Halpin, MS, RD, LD

Maine Medical Center Clinical Nutrition Manager

#### Jean Elie, RD, LD

Central Maine Medical Center Clinical Nutrition Manager

#### Lorraine McKelvie, RD

Eastern Maine Medical Center Clinical Nutrition Manager

### Mary Emerson, MS, RD, LD

Preceptor, School Nutrition Director Sacopee Valley School Nutrition Program

## Kathy Savoie, MS, RD

Preceptor, Cooperative Extension University of Maine Cooperative Extension Program Adjunct Faculty

#### **Anthony Forgionne**

Seventy Five State Street

#### Jill McPhail

Preceptor, WIC

Peoples Regional Opportunity Program

#### David Kessler, CDM

Cedars Nursing Care Center Food Service Director

#### Susan Sullivan, PhD, RD

DPD Director, Educator
University of Maine

Dept. of Food Science/Human Nutrition

#### Adrienne White, PhD, RD

Dietetic Internship Director University of Maine Dept. of Food Science/Human Nutrition

#### Collette Jansen-Sand, PhD, RD

DPD Director, Educator
University of New Hampshire
Dept. of Animal and Nutritional Science
Human Nutrition Center

#### Amy Bacon, DTR

School Nutrition Director MSAD 15 – Nutrition Program SMCC DT Program Graduate

## Jennifer Francis, MPH, RD, LD

**SMCC Adjunct Faculty** 

### Debbie Brooks, MS, RD, LD

SMCC Adjunct

Faculty

# Early Childhood Education Advisory Committee Irving Williams (1996-present)

Instructor

Early Childhood Educations Occupations
Portland Arts & Technology High School (PATHS)

## Margaret Hawkins (2005-present)

Principal

**Brown Elementary School** 

## Janine Blatt (2003)

Early Childhood Consultant Department of Education

## Eva Eldridge (2009-present)

**Executive Director** 

Catherine Morrill day Nursery

Two parent positions to be determined from Spring Point Children's Center

# Electrical Advisory Committee

#### **Neil Berry**

Electrical Sales and Support Leen Company

#### Walter Cary

Business Manager Gilman Electric Supply

#### Thomas N. Clukey

Hardware Support Manager Network Systems, Inc (NSi)

#### James Collins

Biddeford Substation Supervisor Central Maine Power (CMP)

#### Phil Dube

Electrical Project Manager Cianbro Corporation

#### **Cathy Faucher**

Owner/C.E.O. Senior Electrical Engineer Allied Engineering, Inc.

#### Robert Ferrara

Manger of Electrical Design Bath Iron Works (B.I.W.)

#### **Marc Geaumont**

Power Line Supervisor Central Maine Power (CMP)

#### Michael Gervais

Owner / Energy consultant Electrical Controls of Maine

## **Timothy Johnson**

Electrical Division Manager Maine Hardware Stores

#### Dan Labbe

Systems Integration Electrical Engineer IDEXX Laboratories, Inc.

#### **Gerald Lizotte**

Manager of Substation Operations Central Maine Power (CMP)

#### Mark Lowell

Electrical Engineer SGC Engineering

#### Dr. John A. Marshall

Associate Professor
Department of Technology
University of Southern Maine

#### Richard A. Nadeau

Principal, Practice Leader Buildings Engineer NE Stantec

## Frank Nappi

National Semiconductor

## **Philip Ridley**

Owner/C.E.O. SILVEX, Inc

#### **Kerry Robillard**

Branch Manager Graybar Electric Company, Inc.

#### Dan Simpson

Automation Division Logix Products Specialist Horizon Solutions Corporation

#### Dr. James W. Smith

Associate Professor Department of Electrical Engineering University of Southern Maine

#### **David Walden**

Controls Engineering Manager Lanco Assembly Systems

#### Peter Wilson

Master Electrician/Electrical Instructor
Westbrook Regional Vocational Center (WRVC)

#### Jason Woloszyn

Electrical Engineer Fairchild Semiconductor

## Fire Science Advisory Committee

#### Jeff Cammack

Chief

Bangor Fire Department

#### **Don Curtis**

Loss Control Consultant Acadia Insurance

#### Glen Deering

**Deputy Chief** 

Scarborough Fire Department

#### John Dean

Maine Fire Marshal's Office

#### James Ellis

Chief

Holden Fire Department

#### **Kevin Guimond**

Chief

South Portland Fire Department

#### **Greg Hanscom**

Southern Maine Community College Division Chair, Public Safety Department Chair, Criminal Justice

#### Robert Hawkes

Southern Maine Community College Dept Chair, Emergency Medical Services

#### Steve Heckman

Fire Protection Engineering Tech Jackson Labs

#### John Leavitt

Maine Forest Service

#### **Ed Marks**

Maine Fire Training & Education Interim State Administrator

#### **Dave McLean**

Dover Fire Department (Dover, NH) (ret.)

#### John Morris

Department of Homeland Security

### **Holly Scribner**

Vocational High School

#### Jean Wheat

Sappi Paper

HVAC Advisory Committee

Jack Adamo

Infra-Red Applications of Maine

**Greg Antworth** 

Maine Air Conditioning

**Ed Combes** 

Union Oil

**Mark Conley** 

Northeast Mechanical

**George Cookson** 

**Breggy Oil Service** 

Mike Cote

F.W. Webb

**Kevin Fitzgerald** 

**Energy USA Propane** 

**Dan Francis** 

Redlon & Johnson

**Richard Freund** 

Caron & Waltz Plumbing & Heating

**Neil Gerber** 

The Gerber Co.

**Chris Green** 

Mechanical Services Inc.

**Craig Herrick** 

Pine State Plumbing & Heating

**Chris Jordan** 

Johnson and Jordan

Kevin Kieder

Sondik Supply Co., Inc.

Steve McCusker

Pine State Plumbing & Heating

Roger Mitchell

Maine Oil Dealers Association

**Curt Muller** 

Muller Plumbing & Heating

Phil Snyder

Snyder Plumbing & Heating

**Bob Soucy** 

**Granite Group** 

Steve Stackhouse

Portland Winnelson Company

Paul Wohljzen

United Refrigeration

## Heavy Equipment Operations Advisory Committee Mark Curtis

Gorham Sand and Gravel

#### R on Dearborn

**Dearborn Brothers Construction** 

## Sam Barringer

Southern Maine Community College Alumnus Morong Falmouth

## Larry Grondin

(Advisory Committee Chair) RJ Grondin Construction

## George Keim

**Shaw Brothers Construction** 

#### Paul Koziell

**CPM Constructors** 

## Jennifer Moore

Pike Industries Inc.

### **Kevin Murphy**

**RJ Grondin Construction** 

#### **John Paradis**

Nortrax Equipment Company

#### Julian Steer

Pike Industries Inc.

#### **Tim Walton**

Cianbro

#### Stuart Welch

Chadwick-BaRoss

Integrated Manufacturing Advisory Committee

**Greg Bazinet** 

University of Southern Maine

John Berg

**Dearborn Precision Tubler Products** 

Joe Bolduc

Portland Arts & Technology High School

John Brawn

Titan Machine Products Inc.

**Patrick Shrader** 

Arundel Machine

Gene Ellis

Maine State Apprenticeship

Allen Estes

Estes Investments LLC

Stephen Finnigan

Irwin Industrial Tools

Ken Johnson

CNC Systems

**Chuck Keller**Portland Valve

**Norm MacIntire** 

MacIntyre Consulting

Lisa Martin

Manufacturers Association of Maine

Peter Mathiews

Mega Industries

David McCulloch

**Helical Solutions LLC** 

**Tom Narcisso** 

Sanford Regional Vocational Center

**Eric Nelson** 

Consolidated Industries

**Laurie Ritter** 

LAI International

**Andy Paul** 

Pratt & Whittney Aircraft

**Christopher Reimer** 

Nichols Portland

**Bob Smith** 

D&G Machine Products Inc.

**Chuck Tarling** 

D&G Machine Products Inc.

Tom Zack

Lanco Assembly Systems

## Medical Assisting Advisory Committee

## **Crystal Libby Guilford**

Southern Maine Community College Alumnus

### Ms. Angela Dirsa Hansen

Director of Human Resources / Compliance Officer InterMed

### Ms. Beverly Neugebauer

Practice Manager

Coastal Women's Healthcare

## Ms. Marjorie Powers

**Public Representative** 

#### Sarah Fuhrman

Program Medical Director Nurse Practitioner InterMed

### Nancy Smith

Division Chair, Health Sciences Southern Maine Community College

#### **Catherine Shepard**

Southern Maine Community College Alumnus

## **Sharon Hinckley**

HR Benefits Specialist Spectrum Medical Group

#### Kim Goren

Human Resources PrimeCare Physicians

### Cecelia Peaslee

Faculty

Southern Maine Community College

#### **Mandy Morin**

Southern Maine Community College Student Representative

#### Carrie Baker

C. Baker and Associates Public Representative

## Stephen Bugden

Adjunct Faculty
Southern Maine Community College

#### **Abbie Graiver**

Human Resources
Maine Medical Partners

#### **Deborah Murphy**

Southern Maine Community College Student Representative

## Nursing Advisory Committee

#### **Louise Barton**

Nurse Manager

Home Health and Visiting Nurses of So. Maine

#### Jo-Ann Cole

Clinical and Simulation Laboratory Instructor/Coordinator University of Southern Maine

#### **Bonnie Deveau**

Executive Director of Inpatient Services Goodall Hospital

#### Sandra Colello

Nurse Manager R6 Maine Medical Center

### Nancy Craven

Director of Education
Southern Maine Medical Center

#### Liz Elliott

Undergraduate Nursing Coordinator and Instructor University of Southern Maine

### **Nora Holliday**

Director of Nursing Maine Veterans' Home

#### Terry LaCroix

Clinical Education Coordinator, Staff Development Goodall Hospital

#### Terri Mathew

Clinical Nurse Educator Mercy Hospital

#### Krista Meinersmann

Director and Associate Professor, School of Nursing University of Southern Maine

#### Gloria Neault

Staff Development Educator Southern Maine Medical Center

## **Andrea Otis-Higgins**

Director of Clinical Services Genesis Healthcare of Maine

#### **Paul Parker**

Director, Nursing Education and Practice MidCoast Hospital

#### Paula White

Director

Center for Clinical and Prof. Development Maine Medical Center

# Radiation Therapy Advisory Committee Dr. Celine Godin

Radiation Therapy Department Maine Medical Center

## Patton Griggs, BS

Radiation Oncology Department Central Maine Medical Center

#### Dr. J.H. Hanneman

**Retired Radiation Oncologist** 

## Paula Keogh, RT(R)(T)

Radiation Therapy Department Maine Medical Center

### Geri Labonte, RT(R)(T)

Radiation Oncology Department Central Maine Medical Center

### Diane Mulkhey, RT(T)

Radiation Oncology Department Central Maine Medical Center

### Denise Robinson, RT(T)

Radiation Therapy Department Wentworth-Douglas Hospital

## Leslie Weeks, RT(R)(T)

Radiation Therapy Department Maine Medical Center

# Respiratory Therapy Advisory Committee Shirley Belanger, R.R.T.

Pulmonary and Critical Care Associates

## Karen Boyer, R.R.T.

Pulmonary and Critical Care Associates

#### Chuck Carlin R.R.T.

Praxair Homecare

### Bernie Fecteau, R.R.T.

Home Care Supply

### Chris Hirsch, R.R.T.

Pulmonary Med. Dept. Maine Medical Center

### Mary Fink, R.R.T.

Resp. Care Dept.

## Mercy Hospital

**Peter Leavitt, R.R.T.**Respiratory Therapy Dept.

St. Mary's Hospital

## Patricia Lerwick, M.D.

Maine Medical Center

### Garry Michaud, R.R.T.

Respiratory Care Dept.

Central Me. Med Center

### Darren Rainey, R.R.T.

Southern Maine Medical Center

## Lee Gilman Scott, MS, CHES

American Lung Association of Maine

#### Denise Tarbox R.R.T., RPSG

Sleep Institute

Maine Medical Center

#### Brian Viele R.N.

Mid Coast Hospital

Science Advisory Committee

**Greg Bell** 

Dry Mills Hatchery

Mike Doan

Friends of Casco Bay

John Grabowski

Gulf of Maine Research Institute

**Chris Heinig** 

Marine Environmental Resource Assessment

Corporation

Jim Manning

NOAA

Patrice McCarron

**Executive Director** 

Maine Lobster Foundation

Joe Payne

Casco Bay Keeper

**Erin Pelletier** 

Associate Director

Maine Lobster Foundation

**Graham Sherwood** 

Gulf of Maine Research Institute

Pete Slovinsky

Maine Geological Survey

Kristen Grant

Marine Extension Associate

**Karen Young** 

Casco Bay Estuary Project

Welding Advisory Committee

Steve Boulet Wahlco Metroflex

**Thomas Bowen** 

Megquier & Jones

**Bob Carr** 

**Applied Thermal Sciences** 

Dan.Roet

Bath Iron Works

Dan Guerin

Maine Oxy

Krista Irmischer

Jotul

**Eric Johnston** 

**Phoenix Welding** 

Steve Pound

Cianbro Corporation

Steve Pritz

Sanford Regional Vocational Center

**Gus McBrady** 

J.A. McBrady

Erik Miskin

Valley Natural Gases, LLC

**Tracie Travers** 

Associated Builders and Contractors of Maine

# Southern Maine Community College Boards/Committees

# **Maine Community College System Board of Trustees**

SMCC is part of a seven-campus system of community colleges and is administered by the Maine Community College System under the authority of the Board of Trustees. It is a public, non-profit institution supported by student fees, state legislative appropriations and federal funds.

Doris Belisle-Bonneau, Auburn Kris Doody (Vice Chair), Caribou Robert Clark, Caribou Carol Epstein, Bangor Joseph R. Hanslip, Sanford Bridget D. Healy, Freeport Joanna Jones, Waldoboro Dennis King, Westbrook Shepard Lee, Westbrook Merle Nelson, Falmouth Cynthia Phinney, Manchester Honorable Daniel E. Wathen (Chair), Portland Andrea Watkins (student), Windsor

Ex-Officio Members
Susan Gendron
Commissioner
Maine Department of Education

**Laura Fortman**Commissioner
Maine Department of Labor

# **SMCC Foundation Board**

Dr. Barbara P. Biber Linda Boudreau Matthew Cashman Jean Ginn Marvin Ralph C. Good Paul Gray

Dr. Charles J. Gregory, Faculty Representative Samuel Ladd

Don Lee

Dr. Robert P. Lynch, Chair Mike Mahoney Mary Nelson Sean O'Hare, Treasurer Dr. James O. Ortiz Wayne Ross, President Emeritus Steve Thaxton Tim Walton

# **SMCC President's Advisory Committee**

Curtis Ingraham Edward Googins James Marsh Judy Katzel Kathy Dillenback Kevin Murphy Mark Duval Martha Riehle Matt Thornton Rosemarie DeAngelis Sherry Sabo Steve Goodwin Tim Prince

# **Bath Citizens Advisory Committee**

### Carolyn Farkas-Noe

Vice President

Southern Midcoast Maine Chamber

### **George Hunter**

Vice President of Human Resources

Midcoast Medical Center

#### John W. James IV

Director of Public Affairs

**Brunswick Naval Air Station** 

#### Peter S. Kent

District 65 Representative

Maine State House of Representatives

#### Diana McCain

Director

Merrymeeting Adult Education (Topsham)

#### Mary Moore

Director of Guidance Brunswick High School

### **Doug Omatick**

Director of Apprenticeship Program Bath Iron Works

### William Shuttleworth

Superintendent Bath Public Schools

### Jeffrey Sneddon

**Executive Director** 

Midcoast Council for Business Development and Planning