EMCC

College Catalog
2018-2019

MISSION STATEMENT

Eastern Maine Community College
Bangor, Dover-Foxcroft, East Millinocket, Ellsworth

Eastern Maine Community College provides the highest quality post-secondary technical, career, and transfer education and serves as a dynamic community and economic development resource.

To achieve this mission, Eastern Maine Community College

- provides access to affordable technical, career and transfer education.
- awards Associate in Applied Science, Associate in Science, Associate in Arts Degrees; Advanced Certificates; and Certificates for credit instruction.
- offers non-credit, customized courses and programs.
- offers post-secondary programs leading to employment in technical and other career fields.
- provides opportunities for transfer to other post-secondary institutions.
- customizes and provides short-term education and training opportunities for Maine's employers.
- encourages citizenship, leadership, ethical decision-making, and reliable problem solving and offers courses, activities and student services that reinforce those qualities.
- offers skills development in research, writing, reading, and critical thinking needed for continuous learning required in the modern world of work.
- fosters personal and professional development of all employees.
- engages proactively in partnerships with the communities and businesses served by the College.

A MESSAGE FROM THE PRESIDENT ON BEHALF OF THE COLLEGE COMMUNITY

A Great College and a Smart Choice

Welcome to Eastern Maine Community College, where we help to transform people's lives. We're a college with a rich tradition of excellence in teaching and learning. Our strength lies in the deeply committed faculty and staff who work diligently to make sure you have an exceptional experience whether you are beginning your college experience, transferring, receiving training in your current job or retraining for a new career.

Eastern Maine Community College has been helping students achieve their higher educational goals for over 50 years. I am excited that you have selected EMCC to achieve your goals. Our mission is to provide the highest quality technical, career and liberal arts education and to serve as a key community and economic development resource for the entire EMCC service area. We pride ourselves in our academic programs and also the learning that takes place both inside and outside the classroom.

Eastern Maine Community College is a great place to learn, to return, to grow, to succeed. We welcome you!

Lisa Larson, Ed.D.
President

GENERAL INFORMATION

NOTICE OF NONDISCRIMINATION

Eastern Maine Community College does not discriminate as prescribed by federal and/or state law on the basis of race, color, religion, national origin, sex, sexual orientation, age, genetic information, disability, marital, parental or Vietnam era veteran status in specified programs and activities. Inquiries about the College's compliance with, and policies that prohibit discrimination on, these bases may be directed to: Affirmative Action Officer, Maine Hall, Room 140, 354 Hogan Road, Bangor, Maine 04401, telephone number 207-974-4633, voice/TDD 207-974-4658, fax number 207-974-4888, e-mail at jmacdonald@emcc.edu, internet at www.emcc.edu.

United States Department of Education Office for Civil Rights, 5 Post Office Square, 8th Floor, Boston, MA 02109-3921, telephone 617-289-0111, TTY/TDD 800-877-8339, fax 617-289-0150, e-mail OCR.Boston@ed.gov, internet at http://www2.ed.gov/about/offices/list/ocr/index.html.

Maine Human Rights Commission (MHRC), 51 State House Station, Augusta, ME 04333-0051, telephone 207-624-6050, TTY/TTD 207-624-6064, fax 207-624-6063, http://www.maine.gov/mhrc/ and/or Equal Employment Opportunity Commission, 475 Government Center, Boston, MA 02203, telephone 617-565-3200 or 1-800-669-4000, TTY 617-565-3204 or 1-800-669-6820, fax 617-565-3196, internet http://www.eeoc.gov/.

Reserve Clause

Eastern Maine Community College reserves the right to change any provisions, regulations, policies, procedures, costs, or requirements set forth herein and the right to withdraw or amend any services as may be required or desirable by circumstances.

Correspondence

Inquiries should be directed to the appropriate officers of the College.

At Eastern Maine Community College, email addresses
are configured as follows:
Employee'sFirstInitialEmployee'sLastName@emcc.edu
Example: Stacy Green, Director of Admissions = sgreen@emcc.edu

Eastern Maine Community College
354 Hogan Road
Bangor, ME 04401

Telephone: 1-207-974-4600
In Maine: 1-800-286-9357
www.emcc.edu

Academic Affairs .....Elizabeth Russell, Vice President of Academic Affairs
- Automotive Technology.....Rick Thomas, Chair
- Building Construction Technology ..... Les Stackpole, Chair
- Business/Hospitality Management .....TBA
- Career Studies.....Elizabeth Russell, Vice President of Academic Affairs
- Computer Science .....Harold Casey, Chair
- Criminal Justice .....Cornel Plebani, Chair
- Culinary Arts.....Jay Demers, Nathan Scott Co-Chairs
- Diesel, Truck and Heavy Equipment ..... Lowell Gardner, Chair
- Digital Graphics Design .....Heather Magee, Chair
- Early Childhood Education ..... Jane Loxterkamp, Co-Chair
- Education ..... Cynthia Geaghan, Co-Chair
- Electrical and Automation Technology .....Rick Reardon, Chair
- Electricians Technology.....Rick Reardon, Chair
- Emergency Medical Services.....Scott Smith, Chair
- English .....Lesley Gillis, Chair
- Fine Woodworking and Cabinet Making..... Les Stackpole, Chair
- Fire Science Technology..... Chris Beaumont, Chair
- Human Services..... Cynthia Geaghan, Jane Loxterkamp, Co-Chairs
- Liberal Studies..... Robb Freeman, Lesley Gillis, Jeff Melmed, Tri-Chairs
- Math/Science .....Jeff Melmed, Chair
- Medical Assistant Technology.....Sally Hall, Chair
- Medical Office Technology.....Kim Campbell, Chair
- Medical Radiography ..... Heather Merrill, Chair
- Nursing..... Pilar Burmeister, Chair
- Outdoor Recreation and Tourism ..... Jon Tierney, Instructor
- Plumbing..... ..... Wayne Jackson, Instructor

Refrigeration, Air Conditioning and Heating ..... Rick Gomm, Co-Chair
Charlie Veilleux, Co-Chair
Restaurant and Food Service Management ..... Jay Demers, Co-Chair
Nathan Scott, Co-Chair
Social Science ..... Robb Freeman, Chair
Surgical Technology ..... Tisha Clark, Chair
Welding ..... Christopher Maseychik, Chair

Admissions ..... Stacy Green, Director
Advancement and Business Services ..... Jennifer Khavari, Director
Affirmative Action ..... Jody MacDonald, Human Resources Director
College Store ..... Jane Faulkner, Manager
Counseling Services ..... Salena King Caruso, Counselor
Disability Services ..... Liz Atkinson, Coordinator
Enrollment Center ..... Daniel Crocker, Dean
Facilities Management ..... George Hanson, Maintenance Engineer
Financial Aid ..... Candace Ward, Director
General Administrative Matters ..... Terri Adam, President's Office
Health Services and Immunizations ..... Nancy Burns, Administrative Secretary
Institutional Research and Student Data ..... Daniel Crocker, Dean
Library Services ..... Janet Elvidge, Associate Dean
Off-Campus Services

East Millinocket Center ..... Debora Rountree, Associate Dean
One Industrial Drive
East Millinocket, ME 04430
207-746-5741 ● 1-800-498-8200 (in Maine)

Hancock County Higher Education Center ..... Ann Delaney, Director
Mill Mall, 248 State Street, Suite 1
Ellsworth, ME 04605
207-667-3897 ● 1-800-696-2540 (in Maine)

Penquis Higher Education Center ..... Debora Rountree, Associate Dean
50 Mayo Street
Dover-Foxcroft, ME 04426
207-564-2942 ● 1-800-590-2942 (in Maine)

Residential Life ..... Alissa Gervais, Director
Room Reservations and Rental ..... Michelle Bladen
Safety and Security ..... Ruth Doherty, Director
Student Services ..... E.J. Roach, Dean
Student Billing ..... Karen Shorette, Manager of Financial Services
Student Success Center ..... E.J. Roach, Dean
Student Registration ..... Daniel Crocker, Dean
Transcripts ..... Daniel Crocker, Dean
Veteran Affairs ..... Candace Ward, Associate Dean

Academic Programs

	Associate in Arts Degree	Associate in Applied Science Degree	Associate in Science Degree	Advanced Certificate	Certificate
Automotive Technology		●			●
Building Construction Technology		●			●
Business Management – Transfer Option		●			
Business Management – Career Option		●			
Business Management – Small Business Development					●
Career Studies		●			
Community Paramedicine				●	
Computer Science – Coding Option		●		●	
Computer Science – Database Management Option		●			
Computer Science – Help Desk Option		●			
Computer Science – Networking Option		●			
Computer Science – Computer Repair Technology					●
Criminal Justice		●			
Criminal Justice - Corrections					●
Culinary Arts		●			
Culinary Arts – Food Service Specialist					●
Diesel, Truck and Heavy Equipment Technology		●			●
Digital Graphic Design		●			●
Early Childhood Education		●			●
Education – Career and Technical Education Option		●		●	
Education – Elementary Education (K-8) Option		●			
Education – Secondary Education (7-12) Option		●			
Electrical and Automation Technology		●			
Electricians Technology					●
Emergency Medical Services		●			●
Fine Woodworking and Cabinet Making		●			●
Fire Science Technology		●			●
Hospitality and Tourism Management		●			●
Human Services		●			
Liberal Studies	●				
Medical Assistant Technology		●			
Medical Office Technology		●			
Medical Office Technology – Coding Option		●		●	
Medical Office Technology – Computer Applications Specialist					●
Medical Office Technology – Health Care Secretary					●
Medical Radiography			●	●	
Nursing			●		
Outdoor Recreation and Tourism		●			
Plumbing					●
Refrigeration, Air Conditioning and Heating		●			
Refrigeration					●
Restaurant and Food Service Management		●			
Surgical Technology		●			
Trade and Technical Occupations		●			
Welding Technology		●			●

About Eastern Maine Community College

HISTORY

Eastern Maine Community College, formerly Eastern Maine Technical College (EMTC) and Eastern Maine Vocational Technical Institute (EMVTI), was established in 1966 by the Maine State Legislature, under the authority of the State Board of Education. In 1968 the College moved from temporary quarters in downtown Bangor to open farmland on Hogan Road, which is now adjacent to the Bangor Mall district, which includes a multi-cinema complex, shopping opportunities, and many established eateries.

In 1986 the 112th Legislature created a board of trustees to govern all campuses of the System. The name of the College changed from "Technical" to "Community" on July 1, 2003, to more accurately reflect its purpose. The College prepares students for various pathways, including starting their career, furthering their education, or updating their skills.

Today, Eastern Maine Community College offers certificates, associate in applied science degrees, associate in science degrees, associate in arts degrees, and advanced certificates in more than 30 technologies, liberal studies, and other areas of study. Eastern Maine Community College prepares technicians and skilled workers for careers in mechanical, engineering and construction industries, allied health professions, business occupations, and education. Programs of study are developed in cooperation with experts currently working in representative areas of technology. Short-term and specialized training and re-training courses are also available to business, industry, and the community. Approximate enrollment is 1,250 full-time and 1,400 part-time students, with 63 full-time and approximately 120 adjunct faculty.

MORE ABOUT THE EASTERN MAINE COMMUNITY COLLEGE EXPERIENCE

Sports, musical events, theaters, shopping and outdoor recreational activities fill and surround Bangor, home of Eastern Maine Community College. With a population under 35,000, Bangor offers all of the

amenities of a larger city yet provides the safe, peaceful charm of a smaller Maine town.

Within one hour's drive of the spacious Bangor campus, you'll find Acadia National Park, the only national park in the northeastern United States; Mt. Katahdin--known for its challenging hiking trails; and nearby access to the world through Bangor International Airport. Maine's scenic rivers and lakes provide abundant opportunities for white water rafting, kayaking, fishing, and canoeing. You can experience the thrill of big mountain skiing by traveling two hours to Sugarloaf/USA, or you can spend a relaxing day snowboarding at Hermon Mountain--just 15 minutes away.

The City of Bangor boasts the nation's oldest community orchestra, a children's museum, professional theatre company, a civic center and auditorium and several specialty shops and fine eateries. Bangor is the host of the American Folk Festival and the Waterfront Concert series. The Bangor State Fair and the downtown Art Show are annual events that can't be missed.

Eastern Maine Community College is fortunate to have partnerships and articulation agreements with other educational institutions in the region and beyond. These agreements allow for seamless transfer opportunities for students continuing their education. A list of articulation agreements can also be found at http://www.emcc.edu/beyond-emcc/transfer-agreements/.

In addition, three distinct programs are offered to area high school students providing them an opportunity to earn college credits while still enrolled in high school. Additional information can be found at http://www.emcc.edu/academics/programs/dual-enrollment/concurrent-enrollment/.

The main campus of Eastern Maine Community College is located on a 72-acre parcel of land on the Hogan Road in Bangor. Off-Campus Centers are located at the heart of the communities they serve. Our small size and small classes contribute to an atmosphere in which faculty and

students develop friendships and professional alliances that mutually enrich their lives for years to come.

OFF-CAMPUS CENTERS

Eastern Maine Community College has Off-Campus Centers located in Dover-Foxcroft, East Millinocket and Ellsworth. At these centers, individuals can enroll in credit courses and, in some cases, complete most coursework toward an associate degree or certificate. Professional staff is available to assist with academic advising, financial aid, career counseling, placement testing, and course registration. Non-credit courses are also offered at the Centers.

PHILOSOPHY

Eastern Maine Community College is dedicated to providing all students with a well-balanced education focused on problem solving, decision-making, communications, social understanding, computer applications, mathematics, and science. Liberal arts courses are required of all programs to form the foundation for lifelong learning. Technology programs include concentrated studies in both technical theory and application in the area of specialization. Programs and student support services are designed to develop leadership skills, personal responsibility, teamwork, and appreciation of the complex problems faced by a changing society.

MISSION OF THE MAINE COMMUNITY COLLEGE SYSTEM

The basic mission of the Maine Community College System is to provide associate degree and certificate programs directed at the educational, occupational, technical, and transfer needs of the State's citizens and the workforce needs of the State's employers.

The primary goals of post-secondary technical education and the Maine Community College System are to create an educated, skilled and adaptable labor force which is responsive to the changing needs of the economy of the State and to promote local, regional and statewide economic development.

ACCREDITATIONS

Eastern Maine Community College is a publicly supported post-secondary institution, fully accredited by the New England Association of Schools and Colleges, Inc., which is the primary accrediting agency for schools and colleges in the New England states.

New England Association of Schools and Colleges
3 Burlington Woods Drive, Ste. 100, Burlington, MA 01803
Phone : 781-271-0022
www.neasc.org

The Automotive Technology program is accredited by the National Automotive Technicians Education Foundation (NATEF), a division of ASE, as a Master Automotive program in all eight areas of automotive accreditation.

National Automotive Technicians Education Foundation
101 Blue Seal Drive, S.E. Suite 101, Leesburg, VA 20175
Phone: 703-669-6650
http://www.natef.org

The Emergency Medical Services program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs,
25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763
Phone: 727-210-2350
www.caahep.org

Commission on Accreditation of Education Programs for the Emergency Medical Services Professions (CoAEMSP)
8301 Lakeview Parkway, Suite 111-312, Rowlett, TX 75088
Phone: 214-703-8445
FAX: 214-703-8992
www.coaemsp.org

The Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs,
25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763
Phone: 727-210-2350
www.caahep.org

The Medical Radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182
Phone: 1-312-704-5300
www.jrcert.org

The Nursing program is approved by the Maine State Board of Nursing and is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN).

Maine State Board of Nursing
161 Capitol St., 158 State House Station
Augusta, Maine, 04333-0158
Phone: 207-287-1133, Fax: 207-287-1149
www.maine.gov/boardofnursing/

Accreditation Commission for Education in Nursing, Inc. (ACEN)
3343 Peach Tree Rd NE, Suite 850, Atlanta, GA 30326
Phone 404-975-5000, Fax 404-975-5020
www.acenursing.org
The ACEN accreditation is from 2012-2020

The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of Surgical Technology and Surgical Assisting (ARC-STSA).

Commission on Accreditation of Allied Health Education Programs
25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763
Phone 727-210-2350, Fax 727-210-2354
www.caahep.org

The Welding program is certified as a S.E.N.S.E. program (Schools Excelling through National Skills Education) and Educational member through:

American Welding Society
8669 NW 36 Street, Ste. #130, Miami, FL 33166-6672
Phone: 1-305-443-9353 or 1-800-443-9353
http://www.aws.org

CIVILITY STATEMENT

The dictionary describes civility as follows:

- A politeness
- A courtesy
- A polite act or expression
- Not deficient in common sense
- Adhering to the norms of polite social exchange

There will be times that each student, administrator, faculty member or staff personnel will experience frustration to a high degree. When this occurs, and it will, we encourage each person experiencing this high level of frustration to step back, walk away, and return later to discuss the situation. Seek out someone to act as a third party with respect to conflict resolution.

We encourage all individuals who are in any way part of the college community to think ***CIVILITY*** on a daily basis. We want to be a college where:

- respect is expected;
- respect is obvious;
- we all treat each other as we would wish to be treated;
- conflict resolution is the rule of thumb;
- we all feel that someone is available to assist when needed;
- all community members have the same goal—a peaceful and tranquil campus to pursue an education.

HARASSMENT/SEXUAL HARASSMENT/NONDISCRIMINATION POLICY

Eastern Maine Community College has zero tolerance for any forms of harassment or discrimination of our students, employees or visitors. The College recognizes the dignity and the right of individuals to work, learn, play and live in an environment free of harassment and discrimination. If you feel you have been or are being harassed, contact Jody MacDonald, Affirmative Action Officer, by phone at 207-974-4633, or by e-mail at jmacdonald@emcc.edu. The Affirmative Action Officer is located in Room 140 Maine Hall. She will listen to your concerns, explain your rights, and assist you through the grievance process. To the extent possible, the confidentiality of complaints will be protected. College

policy prohibits retaliation or retribution against someone reporting harassment, sexual harassment, or discrimination. Additionally, you may file complaints with the Maine Human Rights Commission or the United States Department of Education, Office of Civil Rights.

See Student Handbook for more information. The Student Handbook can be found on the College's website at http://www.emcc.edu/student-life/resources/student-handbook/

ADMISSIONS INFORMATION

ADMISSION POLICY

Eastern Maine Community College requires applicants to have earned a high school diploma or state high school equivalency certificate (GED or HiSET). Algebra I is required for admission into all programs. In addition, applicants must meet all other program-specific requirements. The College maintains a "rolling admissions" policy for most programs, allowing candidates to apply and be considered for acceptance until the programs are filled with qualified students. However, applicants are advised to apply early because of competition for programs and limited enrollment capacities.

Due to the competitive nature of the Medical Radiography, Nursing, and Surgical Technology programs, a "selective admissions" policy is followed. Applicants to these programs are strongly encouraged to apply early as the file review can begin as early as November. The deadline to submit an application to Medical Radiography and Nursing is December 30 each year. The deadline to submit an application to the Surgical Technology program is February 1 each year. If necessary, applications for competitive programs may reopen at the discretion of the College.

APPLICATION PROCEDURES

Timeline: Although applications for admission may be submitted no earlier than one year prior to the starting date of the program, applicants are advised to apply early because of strict enrollment capacities and competition for programs.

Applications received within fourteen (14) calendar days of the official start of each semester may be reviewed for the next available semester. Limited exceptions may be made for certain programs at the discretion of the College.

Requirements: Applications will be evaluated after the Admissions Office has received the following information:

1. Completed "Application for Admission" and a non-refundable $20 application fee.
2. Essay required of applicants to Medical Assistant Technology, Medical Radiography, Surgical Technology and Welding Technology.
3. Official high school and/or adult education transcript(s) for all years attended sent directly from the high school/adult education provider.
4. GED or HiSET test results (if applicable) sent directly from the Department of Education in the state issuing the test. GED and HiSET results from Maine can be requested at https://www.diplomasender.com/.
5. Transcript(s) of all previous college work sent directly from each institution attended regardless of whether transfer credit is being sought. Applicants must disclose all prior colleges attended. Failure to furnish all information on past education may constitute adequate reason for disqualification of your acceptance or subsequent dismissal from the College as well as possible retraction or denial of financial aid funds.
6. Scholastic Aptitude Test (SAT) or American College Test (ACT) scores sent directly from the College Board or the high school for applicants who will graduate or have graduated from high school within the previous three years. EMCC will also consider the Accuplacer placement assessment for those who have not taken the SAT or ACT.
7. Two recommendations on EMCC reference forms sent directly from the evaluators for applicants to the Medical Assistant Technology, Medical Radiography, Nursing, and Surgical Technology programs.
8. Preadmission test results for applicants to the EMS, Medical Radiography and Nursing programs. Students seeking admission to ALS Pathway courses and/or the EMS program are required to take the FISDAP Exam at a cost of $20-$25. Students seeking admission to the Medical Radiography program are required to take the Health

Occupations Aptitude Exam at a cost of $30. Students seeking admission to the Nursing program are required to take the Kaplan Nursing Admissions Test (NCLEX admissions) at a cost of $20. Pre-admission testing may also be required for other programs at the discretion of the Admissions Committee. Testing for these programs takes place several times throughout the year. Dates vary.

9. Attendance at an information session is required for selected Medical Assistant Technology, Medical Radiography, Nursing, and Surgical Technology applicants, or for other programs at the discretion of the Admissions Committee.

International Applicants*:* Eastern Maine Community College is authorized under federal law to enroll non-immigrant students. Applicants who are citizens of countries other than the United States are expected to submit the same credentials as other applicants, including transcripts of courses taken and examination results. If the documents are not in English, they must be accompanied by an English translation certified by a recognized agency that specializes in evaluation of foreign educational documents. EMCC recommends World Educational Services to obtain an international educational credential evaluation. E-mail: info@wes.org, Bowling Green Station, PO Box 5087, New York, NY 10274-5087. If English is not the applicant's native language, EMCC requires a Test of English as a Foreign Language (TOEFL) score of 530 paper/197 computer based/71 Internet based (iBT). Applicants who have completed EMCC's Integrative English Training Program with 15 credit hours of coursework with a 3.0 GPA or higher are exempt from providing TOEFL results. International students are encouraged to apply for admission and supply all required documentation prior to July 1 for fall enrollment and prior to November 1 for spring enrollment. Once accepted into a program of study, an I-20 document will be prepared for the international student. This document will allow an international student to interview for their student visa. International students attending Eastern Maine Community College may arrive in the United States up to thirty days prior to the start of semester classes.

Career Studies Applicants*:* Prior to completing an application, persons interested in the Career Studies program should meet with the Program

Coordinator to determine the specific individual requirements of this degree.

Homeschooled Applicants*:* Homeschooled students are required to submit an official school transcript or an annual assessment of courses completed and one of the following: SAT, ACT, HiSET or GED results.

CRIMINAL BACKGROUND SCREENING

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

All applicants to Emergency Medical Services, Medical Assistant Technology, Medical Radiography, Nursing, Plumbing Technology and Surgical Technology who are offered admission, as well as applicants admitted to Fire Science Technology (Live-In Track only) will be required to submit to a national criminal background screening process at their expense within 30 days of acceptance. Applicants who have engaged in any activity or behavior which may be considered abuse, neglect or exploitation of a minor or of an incapacitated or dependent adult, or who have been convicted of any crime involving fraud or dishonesty, or drugs, or for which imprisonment of one year or more has been imposed are urged to seek clarification regarding program completion requirements from the Director of Admissions prior to application submission.

To Order a Criminal Background Screening: EMCC has partnered with American DataBank to conduct national background screenings. If you have been accepted into a program of study requiring a background screening, you are required to order the background screening, at your own expense, within 30 days of acceptance. Results will be sent directly to EMCC. The minimum fee is $75. Additional fees may be incurred for

multiple names and/or addresses within the past 7 years. The results of a criminal background screening will be kept on file and will expire 12 months from the date it was conducted unless the student has been continuously enrolled at EMCC since the semester following the initial screening. In all circumstances, it is the expectation that the student will convey any and all new criminal convictions and pending convictions to the Director of Admissions or to their Department Chairperson. Questions and concerns should be directed to the Director of Admissions.

EMCC does not currently conduct criminal background screening for applicants to **Criminal Justice**; however, individuals who have engaged in certain criminal activity could be denied access to gainful employment in their intended field. Prior convictions for Class D misdemeanors and felony offenses, including those involving drug-related charges and domestic violence, can potentially limit or prevent access to employment opportunities in the justice professions. Those students seeking admission into the Criminal Justice program are strongly encouraged to seek clarification from the Director of Admissions prior to submitting an application.

EMCC does not currently conduct criminal background screening for applicants in other programs [including but not limited to Automotive Technology; Diesel, Truck and Heavy Equipment Technology; Fire Science Technology (In-Service Track); Human Services; Medical Coding; or Medical Office Technology] however, individuals who have engaged in certain criminal activity could be denied access to gainful employment in their intended field. Additionally, licensing boards for certain professions may deny the individual the opportunity to sit for an examination if they have been convicted of certain crimes. Individuals who have engaged in any activity which may be considered abuse, neglect or exploitation of a minor or of an incapacitated or dependent adult, or who have been convicted of any crime involving fraud or dishonesty, or drugs, or for which imprisonment of one year or more has been imposed are urged to seek clarification from the Director of Admissions prior to application submission.

All students enrolled in EMCC's **Education** programs must apply to receive fingerprint clearance from the Maine Department of Education

prior to registration for second semester courses. The total cost of this process is $75 and this fee will be attached to a required introductory course. Admitted students will need to register and complete the application process in their first semester of their Education program with a program advisor. The card expires five years from date of issue.
Individuals who have engaged in certain criminal activity could be denied access to gainful employment in their intended field. Additionally, field placement sites may deny the individual access to their site if they have been convicted of certain crimes. Individuals who have engaged in any activity which may be considered abuse, neglect or exploitation of a minor or of an incapacitated or dependent adult, or who have been convicted of any crime involving fraud or dishonesty, or drugs, or for which imprisonment of on year or more has been imposed are urged to seek clarification from the Director of Admissions prior to submitting an application for admission to the Early Childhood Education or Education programs.

SPECIAL CONDITIONS OF ADMISSION, ENROLLMENT, AND PARTICIPATION

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.

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

- "Applicant" means a person who seeks to attend, but is not yet admitted to, or enrolled in, a college; "Student" means a person who has been admitted or enrolled; and "Individual" means both an applicant and a student.
- "Admission" means entry into a college, off-campus site, program or course; "Enrollment" includes registration in online and on campus courses, regardless of location of course delivery; and "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.

- "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
    - 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 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; or
    - lack of evidence of an individual's ability to succeed academically or other evidence that the individual is unlikely to succeed. Such evidence includes but is not limited to the individual's prior performance at other educational institutions.
- A "condition" can include either exclusion, restriction or both.

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 an individual has been criminally convicted or 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.

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 the 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.

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 individual's:

- likelihood of success in a program to 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 or harm to persons or property.

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:

1. Identify the specific nature of the student's special circumstance. For example, a college should consider the following:
    a. Whether the conduct underlying the special circumstance was admitted or proven, or is not yet admitted or proven;
    b. 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;

   c. Whether the conduct was against a person or property, violent or passive; and intentional, reckless, negligent or grossly negligent;
   d. When the harm actually or allegedly caused was minor and temporary or serious and permanent;
   e. Whether the student acknowledged the student's responsibility by plea, or contested by trial and/or appeal;
   f. 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
   g. Any other factor that is relevant and material.
2. Consult, as appropriate, with the MCCS General Counsel;
3. Weigh the individual's circumstances against the college's interests in, for example, those issues addressed in *Section D* above and determine the rational relationship between the facts of an individual's particular case and the college's interests in excluding or limiting the individual; and
4. Impose those conditions that by amount, scope and duration are reasonable under the particular circumstances.

SELECTION CRITERIA

Eastern Maine Community College determines the admissions status for applicants by considering the following criteria:

- high school transcript and/or GED or HiSET scores;
- academic performance in prerequisites for the program of study;
- class standing;
- cumulative grade point average;
- essay, when required;
- recommendations, when required or voluntarily submitted;
- information session, when required;
- results of Scholastic Aptitude Test (SAT) or American College Test (ACT) from the College Board; and/or other pre-admission tests, if applicable.

ADMISSIONS CATEGORIES

The following categories are used during the admissions process.

- **Acceptance**—The applicant has met the entrance requirements and has been approved for a program of study.
- **Conditional Acceptance**—The applicant is admitted with conditions (college readiness coursework, for example) which must be successfully completed within the prescribed timeframe.
- **Waiting List**—1) The program applied for is filled, but the applicant may be accepted if an opening occurs; or 2) student qualifications for acceptance are not strong enough to be given first priority, but are sufficient to warrant periodic review. The College maintains a limited waiting list. Waiting list status does not guarantee acceptance for admission the following semester/year; applicants must reapply for admission.
- **Non-acceptance**—The applicant has not met the entrance requirements or has not met the standards established for a competitive program.

ACCEPTANCE PROCEDURES

1. Within 30 days of acceptance, students are asked to pay a **tuition deposit of $75** to the Business Office. This deposit ensures a position in the program and is credited to the student's first semester bill.
2. Students wishing to live in a residence hall are asked to submit a **room deposit of $100** with the **residence hall application** to the Business Office. This deposit is credited to the student's first semester residence hall bill.
3. Students must complete the Eastern Maine Community College Health History Form and provide proof of diphtheria-tetanus (administered within the last ten years) and two doses of the measles, mumps, and rubella vaccines (administered after student's first birthday) at least two weeks prior to the start of classes. Students admitted to one of the allied health programs are required to provide additional immunization materials as outlined in the acceptance packet.
4. Within 30 days of acceptance, students are required to take the **computerized placement test** (Accuplacer©) including writing sample so that the College may determine appropriate placement in math and writing. Based on the results of this assessment, students may be required to successfully complete math and English courses that are not part of the program curriculum. As a result, the length of time

required to complete the program may be extended. Testing exemptions may be made by the Admissions Committee for students who have taken the placement assessment within the past three years, students with transfer credit for comparable coursework, and students whose SAT or ACT results exceed the pre-established cutoffs.

5. All applicants to Emergency Medical Services, Fire Science (Live-In Track only), Medical Assistant Technology, Medical Radiography, Nursing, Plumbing Technology and Surgical Technology who are offered admission will be required to submit to a national criminal background screening process at their expense within 30 days of acceptance.
6. All applicants to Early Childhood Education, Education & Secondary Education who are offered admission will be required to obtain fingerprinting clearance from the Department of Education prior to enrolling in field placement courses.

APPLICATION FOR READMISSION

Matriculated students who have taken a leave of absence, including military leave; have been dismissed from Eastern Maine Community College for academic or disciplinary reasons; or have not continued in program-specific courses for more than two consecutive semesters may seek readmission to the same program under the following provisions. The catalog in force at the time of readmission will be used to determine program requirements. Students shall be subject to all rules and regulations effective at EMCC at the time of, or subsequent to, readmission. Re-entry into certain courses and/or programs will be on a space available basis. Students seeking readmission must:

1. Submit an Application for Readmission (SNAP-APP);
2. Meet the admission requirements (including prerequisites for individual courses) which apply to the program at the time of readmission;
3. Send official transcripts for all courses taken since last attending EMCC (all previous academic transcripts will be required if the student is returning after five years);
4. Be recommended for readmission by the Readmission Team.
5. In addition to the above-stated requirements, applicants who have been dismissed from EMCC must also submit a non-refundable $20

reapplication fee and an essay outlining what steps were taken since dismissal from the College to ensure academic success upon return to the environment.

Student material may be reviewed by a Readmission Team comprised of program faculty, the Director of Admissions, and the Vice President of Academic Affairs. This Team may request additional information from other EMCC faculty and staff and/or the applicant. An interview with the Readmission Team and/or references may be required. The student will be notified of the decision via letter from the Director of Admissions.

Any one or more of the following are examples of reasons that a request for readmission to Eastern Maine Community College may not be granted: 1) lack of available space in the program; 2) more than one dismissal from EMCC; 3) prior disruptive and/or damaging behavior; 4) failure to demonstrate adequate personal improvement since dismissal; 5) overdue balance owed to EMCC. There may be other reasons not listed.

DEFERRED ADMISSION

Students who have been accepted and who have paid the tuition deposit may postpone their matriculation for one semester or one year by making such a request in writing to the Director of Admissions. Permission to defer an applicant's admission is granted at the discretion of the Director of Admissions. Applicants whose admission is deferred are responsible for updating the Admissions Office of all pertinent changes (e.g. name, address, courses completed). The tuition deposit is retained by the Business Office unless the applicant chooses to withdraw and follows the refund policy.

TRANSFER CREDIT TO EASTERN MAINE COMMUNITY COLLEGE

Students may transfer credits earned at other regionally accredited institutions prior to beginning their programs of study. The responsibility rests with students to provide the Admissions Office with an official copy of each college transcript, mailed or faxed directly from each college to the Admissions Office. Copies of course syllabi may be requested.

Generally, courses with grades of C (2.0) or better which are judged by Eastern Maine Community College to be equivalent to Eastern Maine Community College course offerings will be transferred. On occasion, examinations may be required to show competency of subject material. Students must earn at least 25% of their credits, including substantial work in their program-specific courses, for programs exceeding 30 credits. Students must earn at least 75% of the total required credits for any program consisting of 30 or fewer credits.

In general, only courses taken within the past ten years are reviewed. Courses older than ten years may require additional documentation in order for transfer credit review to occur. Eastern Maine Community College is the final judge regarding awarding of transfer credit from other institutions.

Students who have achieved acceptable Advanced Placement, College Level Examination Program (CLEP) or Defense Activity for Non-Traditional Education Support (DANTES) scores may also be granted academic credit if the course is in those students' programs of study. Transferred course grades and/or CLEP scores will appear on the students' EMCC transcript but will not be used in computing grade point averages. Students with questions about these examinations should contact the Academic Affairs Office.

Eastern Maine Community College is a Service Members Opportunity College (SOC). Assessment of service-connected prior learning is conducted using various nationally recognized resources for determining course equivalence. Students eligible for veterans' benefits must arrange for evaluations of all previous post-secondary educational experiences for possible transfer credit.

Awards of Excellence, Honors, High Honors, and other recognitions of achievement require that a student earns 75% of credits from courses taken at EMCC.

NEW ENGLAND REGIONAL STUDENT PROGRAM

Qualified residents of New England states other than Maine may be admitted to Eastern Maine Community College at reduced tuition rates

(in-state tuition plus 50%) through the New England Regional Student Program (NERSP), sponsored by the New England Board of Higher Education (NEBHE). The rate for 2018-19 is $141 per credit hour.

FINANCIAL INFORMATION

TUITION, ROOM AND BOARD

Currently, tuition is assessed at a rate of $94 per credit hour for in-state students and $188 per credit hour for out-of-state students. **Students are advised that costs are subject to change without notice**.

Combined room and board charges for 2018-2019 are as follows:

On-campus housing – Acadia Hall:
Room & Board per semester based on Meal Plan A is $4,115
Room & Board per semester based on Meal Plan B is $3,717

On-campus housing – Kineo Hall:
Room & Board per semester based on Meal Plan A is $4,515
Room & Board per semester based on Meal Plan B is $4,117

Meal Plan A is a 7-day meal plan and is designed for students living in college housing who stay weekends. Meal Plan B is designed for students living in college housing who do not anticipate using the dining hall on weekends.

PARKING/VEHICLE REGULATIONS

Parking Decals*:* Student vehicles on campus must display a current College decal. Parking decal requests are available online at www.emcc.edu or the *MyEMCC* portal.

Safety and Security Fee*:* All matriculated and non-matriculated students, faculty and staff must obtain a parking pass. The Safety and Security Fee helps cover the cost of day and evening security personnel for students on both the Bangor campus and our off-campus Centers. The College Safety and Security Fee is $2.50 per credit hour. Students who use

multiple vehicles may obtain up to two (2) decals. A third decal may be purchased for $5.

Parking Fines*:* A $100 fine per offense will be assessed for parking in handicapped parking spaces. A $25 fine will be assessed for parking in a fire lane and to students whose vehicle is parked in unauthorized areas. **Grades and transcripts will be withheld for students who fail to pay fines.**

Vehicle Regulations*:*

- The speed limit on campus is 15 miles per hour.
- Parking on campus roads, behind and beside the residence halls, in loading zones, on walkways, or on grassed areas is prohibited at all times.
- Motor vehicles must not be left on campus during vacations without making special arrangements with the Student Services Office in Room 105, Maine Hall between the hours of 8:00 a.m. and 4:30 p.m., Monday – Friday.
- Excessive noise by vehicles or its occupants, or otherwise operating in a manner that is dangerous, is prohibited.

Violation Penalties*:* Vehicles parked in unauthorized areas may be ticketed and/or towed at the owner's expense, without warning. Unauthorized areas include, but are not limited to: parking in a "No Parking Zone", parking on the roadway, hindering snow removal, parking in unauthorized areas, not displaying a current EMCC decal, occupying more than one parking space or parking in handicap spaces without proper identification. Safety is always our concern.

BOOKS AND SUPPLIES

The cost of books and supplies vary by program of study. All costs of books and supplies are a direct expense and are paid by the student. Books can be purchased at the College Store and students may be eligible for a College Store credit if they have financial aid in excess of their semester bill or if they qualify for the College's installment payment plan and choose to include a College Store credit.

FEES

College Activity Fee*:* The College Activity Fee is $3 per credit hour. The College Activity Fee supports student activities at Eastern Maine Community College including sanctioned clubs and organizations, Student Senate, special events, recreation, and commuter services.

College Comprehensive Fee*:* The College Comprehensive Fee is $9.40 per credit hour. The College Comprehensive Fee supports student services at Eastern Maine Community College including health services, personal counseling, intercollegiate sports, registration, grades and transcripts, graduate job services, and student IDs. The fee does not cover technology, orientation, graduation, lab, residence hall recreation, or liability insurance fees.

Information Technology Fee*:* The College Information Technology Fee is $9.00 per credit hour. This fee supports computer services for students and provides all students with on campus access to the Internet and e-mail. In addition, it helps to fund online library resources.

Liability Insurance Fee*:* The $13 fee per year for $1,000,000 malpractice liability insurance is mandatory for students in standard health occupation programs. The cost for $1,000,000 coverage for students in higher risk health specialty programs is $55 per year. This fee is not refundable.

Matriculation Fee*:* The $70 Matriculation Fee is a fee charged at the time of initial enrollment as a matriculated student. This fee covers costs associated with new student orientation and graduation. This is a one-time fee.

Residence Hall Recreation Fee: A Residence Hall Fee of $65 per semester is required of all residents. Proceeds from this fee support activities and programs in the residence halls. This fee also supports cable television service to the lounges and upgraded and enhanced internet access to students living in the residence halls.

Residence Hall Security Deposit*:* The deposit is $100, which is charged $50 per semester.

Course Fees*:* These fees vary by program to cover costs of supplies and materials. In addition, some programs require special fees for national or state tests. Students are advised that these fees may change without notice. **These fees are charged on a <u>per credit hour</u> basis by technology course.**

Automotive Technology (ATA, ATH, ATT) 18.80
Building Construction (BCT) 18.80
Business Management (BUA, BCA, BMT) 9.40
Civil Engineering Technology (CET) 18.80
Computer Aided Drafting and Design (CAD) 18.80
Computer Science Technology (CST)..... 18.80
Criminal Justice (CRJ)..... 18.80
Culinary Arts (CUL) 18.80
Diesel, Truck and Heavy Equipment (ATA, ATT, ATH) 18.80
Drafting (DTG) 18.80
Early Childhood Education (ECE, EDB) 9.40
Education (ECE, EDB) 9.40
Electrical and Automation Technology (EPT) 18.80
Electricians Technology (ELC)..... 18.80
Emergency Medical Services (EMS) 18.80
Fire Science (FIR) 9.40
Fine Woodworking and Cabinet Making (FWC) 18.80
Hospitality and Tourism Management (HTM) 18.80
Human Services (HUS)..... 9.40
Math/Science (BIO, CHE, CHM, MAT, MATL, NUT, PHY)..... 18.80
Medical Assistant (MAS) 18.80
Medical Office Technology (BMT)..... 9.40
Medical Radiography (MRT)..... 18.80
Nursing (NRG, NUR) 18.80
Outdoor Recreation and Tourism (ORT) 18.80
Plumbing..... 18.80
Refrigeration, Air Conditioning and Heating (RAH) 18.80
Surgical Technology (SUR)..... 18.80
Trade and Technical Occupations (TTO) 9.40
Welding/Pipe Welding (FIT, WEL) 18.80

General Education courses also having fees:
ART, ASL, CAS, ECO, ENG, FYE, GIS, GOV, HIS, HUM, ISA, KOR, LAE, LAM, PHI, PSY, SOC, SPE 9.40

Service Fees*:*

ATA 100	Automotive Technician Test Prep	147.00
ATA 124	Automotive Maine State Inspection Fee	34.00
ATA 215	Automotive Technician Test Prep	147.00
ATA 220	Engine Performance and Diagnosis	35.00
ATA 235	Automatic Transmissions and Transaxles	77.00
ATH 175	Diesel, Truck & HE Technician State Inspection Fee	51.00
BCT 151	Building Construction Certification Fee	50.00
BCT 152	Building Construction Certification Fee	50.00
BCT 255	Building Construction Certification Fee	50.00
BCT 272	Building Construction Certification Fee	50.00
BMT 221	Medical Transcription I	196.00
BMT 222	Medical Transcription II	156.00
CST 123	PC Hardware and Operating Systems	184.00
CST 124	Introduction to Linux Certification	154.00
CST 162	Net+ Certification	142.00
CST 164	Healthcare IT Certification	75.00
CST 221	Network Security	200.00
CST 232	Server Operating Systems	230.00
ECE 110	Child and Adolescent Development	70.00
ECE 221	STEM Curriculum for Young Children	25.00
ELC 100	Introduction to Electricians Technology - OSHA	25.00
EMS 100	First Responder	165.00
EMS 121	First Aid in the Workplace	81.00
EMS 123	Emergency Medical Technician	165.00
EMS 124	First Responder to EMT- Bridge	165.00
EMS 125	Advanced Healthcare Provider to EMT Bridge	165.00
EMS 201	Fundamentals of EMS	175.00
EMS 202	Cardiac/Respiratory Emergencies	100.00
EMS 205	EMT Intermediate Skills Seminar	100.00
EMS 206	Intermediate Clinical Preceptorship and Field Exp.	110.00
EMS 208	Advanced Emergency Cardiovascular Care	200.00
EMS 210	Paramedic Emergencies I	210.00
EMS 212	Emergency Care Across the Lifespan	225.00

EMS 214	Paramedic Skills Seminar	350.00
EMS 215	Paramedic Clinical Preceptorship and Field Exp. I	100.00
EMS 216	Paramedic Clinical Preceptorship and Field Exp. II	30.00
EMS 217	Paramedic Clinical Preceptorship and Field Exp. III	200.00
EMS 231	Paramedic Emergencies II	225.00
EMS 233	Paramedic Emergencies III	150.00
EPT 123	Power Distribution	25.00
FWC 103	Fine Woodworking Certification Fee	62.50
FWC 111	Fine Woodworking Certification Fee	62.50
FWC 201	Fine Woodworking Certification Fee	62.50
FWC 211	Fine Woodworking Certification Fee	62.50
MAS 231	Medical Assistant Externship – AAMA Certification	125.00
MRT 230	Radiology Review & Career Planning	200.00
NUR 105	Nursing Testing Fee for Kaplan	150.00
NUR 136	Nursing Testing Fee	150.00
NUR 267	Nursing Testing Fee	134.50
NUR 270	Nursing Testing Fee	134.50
ORT 141	Wilderness First Responder	200.00
RAH 103	RAH Certification/Licensing Fee	267.00
RAH 104	RAH Certification/Licensing Fee	267.00
RAH 203	RAH Certification/Licensing Fee	267.00
RAH 204	RAH Certification/Licensing Fee	267.00
SUR 105	Surgical Technology Fee	247.00
SUR 123	Surgical Technology Fee (current cohort only)	190.00
WEL 134	Welding Certification Fee	315.00
WEL 137	Welding Certification Fee	315.00
WEL 277	Welding Certification Fee	315.00

MAINE RESIDENCY

Introduction*:* This policy defines the category of students and/or student applicants who qualify for the Maine Community College System (MCCS) in-state tuition rate.

A. **Policy** - The following students qualify for the MCCS in-state tuition rate.
   1. Students who have established a Maine residence within the meaning of this policy

a. For purposes of this policy, a student established a primary domicile in Maine for at least the 12 consecutive months immediately prior to the date of admission (not application, registration or enrollment). For purposes of this policy, "primary residence" means the student's primary physical presence, degree of settled connections and sincere regard for that domicile as home.
b. All factors and circumstances relating to determination of residency are considered on a case-by-case basis. The burden is on the student to prove primary residency in Maine. Evidence of such residence includes, but is not limited to, driver's license, voter registration, marriage license or domestic registration, signed residential lease, mortgage, property taxes, utility bills, State or Federal income tax filing, or letter on letter head from a nonprofit entity or government agency attesting that the student resides in Maine.

2. Students who are claimed as dependents for tax purposes by a parent or other guardian, provided such claimant(s) are themselves residents within the meaning of this policy.
3. Students who are members of the Armed Forces during their period of active duty in Maine, or who are claimed as dependents by members of the Armed Forces during such member's period of active duty in Maine.
4. Students who are married to, or domestically registered with, a person who is a resident within the meaning of this policy, provided that the student intends to establish and maintain a domicile in Maine.
5. Students who qualify through a special MCCS program that otherwise grants in-state rate access. Current examples of such programs include the APPLE and New Brunswick Community College initiatives. (Students other than New Brunswick Community College students, who are not legal residents of the United States, do not qualify for the MCCS in-state tuition rate.)
6. Students who, for other compelling reasons, are determined by the College president to qualify for the in-state rate.

B. **Evidence of Residence** – All factors and circumstances relating to determination of residency are considered on a case-by-case basis. The burden is on the student to prove establishment of Maine

residence for other than educational purposes. Examples of factors considered include: signed residential lease, filing of Maine resident State income tax return; Maine address on latest Federal income tax return; home ownership and payment of property taxes in Maine; driver's license; voter registration; marriage license or domestic registration; and/or military home of record in Maine.

C. **Mid-Semester Change in Status** – A student's classification for resident or non-resident tuition shall apply for the entire semester for which the classification was made and shall not be changed once a semester commences, provided that erroneous classifications may be reviewed and addressed as the College determines is appropriate.

D. **Temporary Absence from the State** – Maine residents who are absent from the State for military or full-time educational purposes will normally remain eligible for in-state tuition, provided such persons continue during such period of temporary absence to claim Maine as their state of residency on all official documents and declare income earned out-of-state on Maine income tax returns.

PAYMENT OF COSTS

Student Responsibilities*:* All bills are the responsibility of the student and all bills are posted to students' *MyEMCC* accounts.

Billing*:* Students are billed for courses on a per credit hour basis each semester. Full payment of the semester charges within the time prescribed is a prerequisite to registration and inclusion on the official class lists. Returned checks will be subject to a $25 service fee.

Private Scholarships*:* Scholarships will not be listed on a student's statement of account and will be deducted when payment of the scholarship is received.

Sponsored Students*:* If a student's tuition bill is being paid by a Federal, State, or private agency, the student is responsible for providing the Business Office with a current letter of intent or authorization. The letter should verify the name of the sponsored student, the terms/conditions of the sponsoring agency and details of tuition and fees to be billed. The Business Office will apply financial aid (Pell/SEOG/ME State Grant) funds awarded to the student's account before the sponsoring agency is billed,

unless otherwise stated on the letter of intent or authorization. If the sponsoring agency requires Federal Direct Loans to be used, it must state that in the authorization. EMCC does not accept verbal authorizations from sponsors.

Authorizations and/or purchase orders may be faxed to the Business Office at 207-974-4666. Without this authorization, EMCC is required to bill the student for all charges.

Unpaid Financial Obligations*:* Students are not permitted to attend classes after the first week of any semester if their semester bills have not been paid in full or if specific arrangements for payment plans have not been made with the Business Office. Students who are delinquent according to signed agreements may be dropped from enrollment or may be assessed late charges. Residential students who are delinquent in the payment of room and board charges may be dismissed from the residence halls.

The College is authorized to withhold grades, degrees, diplomas and transcripts from students for failure to pay all lawful fees and charges. A $50 late fee will be applied to delinquent accounts.

DEPOSITS

Tuition*:* A tuition deposit of $75 is required upon notification of acceptance. Deposits will be credited to semester bills and will be refunded only if written notification of non-enrollment is sent to the Admissions Office before May 1 for fall enrollment and before September 15 for spring enrollment. Students admitted and making a deposit after these deadlines will have 30 days from the date of acceptance to request a refund.

Room Deposit*:* An additional residence hall deposit of $100 is required of all students who plan to live in a residence hall. Returning students must submit this deposit by April 15 for fall enrollment to retain their room assignment. This deposit will be credited to the semester bill. It will be refunded only if a written request is sent to the Residential Life Department before July 1 for fall entrance and before December 1 for spring entrance.

STUDENT BILL ADJUSTMENT POLICY

Definitions:

- Bill Adjustment - Financial change made to a student's bill/account.
- Deposits - Charges held for a particular reason. For example, deposits are used to hold a student's space in a program of study, in a technology, or in a residence hall.
- Semester-long Day Course - A course which is offered for the entire length of the semester, usually 15-16 weeks. Semester-long courses are usually general education courses such as mathematics, English, social sciences, and science courses. A number of technology courses are semester-long.
- Modular Course - A course that does not follow a standard day schedule. Modular courses vary in length, instructional time and day. Frequently, these courses are offered in a sequence over the course of a semester.
- Summer/Evening/Weekend Course - Course taught after 5 p.m. or taught at a time other than the fall and spring semesters, Monday through Friday format.

BILL ADJUSTMENT SCHEDULE FOR STUDENTS ENROLLED IN CREDIT STUDY (TUITION, ROOM AND BOARD, COMPREHENSIVE FEES, SERVICE FEES, AND TECHNOLOGY FEES):

Bills will be adjusted when a student withdraws from a course or the College, following College policy and procedures. The add/drop and College withdrawal procedures ensure that all offices are informed of the enrollment status of a student and that bill adjustments are completed correctly.

Percentage of Costs Credited To Bill*	Semester-long Day/Modular/Evening/ Summer Courses	Procedure
100%	Course cancelled by College	**Adjustments will be made to student's account by College**
100%	Official withdrawal from a course which produces a net reduction in student's semester credit hours and which is **within 6 calendar days of the semester's first day of classes**	**Withdrawal from the College or schedule adjustments** - Go to Enrollment Center (Katahdin Hall)

50%	Official withdrawal from a course which produces a net reduction in student's semester credit hours and which is **between 7 and 10 calendar days of the semester's first day of classes**	**Course Withdrawal –** Go to Enrollment Center (Katahdin Hall)
0%	Official withdrawal from a course which produces a net reduction in student's semester credit hours and which is **after 10 calendar days of the semester's first day of classes.**	**Course Withdrawal -** Go to Enrollment Center (Katahdin Hall)
0%	**Unofficial withdrawal at any time – including "no shows"**	
*Required deposits will be retained by the College.		

The following schedules are based on Maine Community College policy and are used to adjust tuition, room and board, residence hall recreation fees, comprehensive fees, service fees, and technology fees.

Exceptions to refund policy are possible due to the following:

1. Refunds for room and/or board cancelled after a semester begins due to an unexpected or uncontrollable event.
2. Exceptions on a case-by-case basis for students who present unusual and compelling medical or other significant extenuating circumstances. These exceptions can be made only at the senior management level.

Refunds of Room and Board Charges		
Percentage of Costs Credited To Bill*	**Semester-long Day/Modular/Evening/ Summer Courses**	**Procedure**
100% of room and board charges	College residence cancelled by College	**Adjustments will be made to student's account by College**
100% of room and board charges	Official withdrawal from a College residence prior to the **semester's first day of classes**	**Notification from student to Residential Life**
80% of room and board charges	Official withdrawal from a college residence prior to the **end of the second week of classes**	**Notification from student to Residential Life**

60% of room and board charges	Official withdrawal from a College residence prior to the **end of the third week of classes**	**Notification from student to Residential Life**
40% of room and board charges	Official withdrawal from a College residence prior to the **end of the fourth week of classes**	**Notification from student to Residential Life**
20% of room and board charges	Official withdrawal from a College residence prior to the: **end of the fifth week of classes**	**Notification from student to Residential Life**
0%	Official withdrawal from a College residence any time after the end of the fifth week of classes	
0%	Unofficial withdrawal from a College residence at anytime	
*Required deposits will be retained by the College.		

Modular courses may be prerequisites for subsequent modular courses. Students enrolled in modular courses, who either drop enrollment in their technology or fail a module, may not be allowed to attend other modular courses in the sequence. In such cases, the student bill will be adjusted using the bill adjustment schedule.

Note: Federal Title IV financial aid recipients may lose financial aid and/or be required to repay financial aid if enrollment and cost of attendance are decreased. It is wise to consult with a financial aid advisor prior to making any adjustments to enrollment status or course enrollment.

Bill Adjustment for Matriculation Fee*:* The Matriculation Fee is a one-time administrative fee charged at the time of initial enrollment as a matriculated student. No adjustment for this fee will be made to the student's account after the beginning of the semester or completion of orientation. If a student chooses not to attend orientation or graduation, the student is not exempt from this fee.

Bill Adjustment for Deposits*:* Deposits are addressed in various ways.

Tuition Deposit for Newly Accepted Students*:* A tuition deposit of $75 is required upon notification of acceptance into a program of study. This deposit is credited to the semester bill. Newly accepted students are asked to send this deposit to hold a place in the program of study.

On occasion, newly admitted students may change their educational plans and not enroll. In order to receive a full refund of the tuition deposit, these students must notify the Admissions Office in writing by May 1 for fall semester enrollment and by September 15 for spring enrollment.

Housing Deposit: On occasion, students may make other plans and decide not to reside on campus. In order to receive a refund of the residence hall deposit, these students must notify the Director of Residential Life in writing by July 1 for fall semester residency and by December 1 for spring semester residency.

Room deposits for students who apply and are unable to be assigned campus housing will be refunded or applied to any outstanding bill on file with the EMCC Business Office. Following the first day of the semester, adjustments to student bills will follow the previously stated bill adjustment schedule.

Residence Hall Security Deposit*:* The security deposit of $100, charged $50 each semester, is held until the end of the academic year. All or part of this fee is refundable upon departure provided that:

1. The resident's room, furnishings and public areas are in the same condition as they were during move in, all belongings have been removed and room has been cleaned.
2. The resident follows the proper checkout procedure as outlined in the Residential Life Handbook, which includes a room inspection by the Resident Director or his/her designee.
3. The resident leaves for reasons other than a violation of the Student Code of Conduct or Housing Contract.

In addition, repairs for damages which occur in public areas that cannot be assigned to an individual will be divided amongst the occupants/residents of the building and deducted from each occupant/resident's security deposit. Any charges which exceed a resident's security deposit will be added to the student's account with the Business Office. In addition, the Business Office reserves the right to retain any resident's security deposit to cover any outstanding charges on the student's account.

Bill Adjustment Schedule for Non-Credit Courses, Seminars, and Workshops*:* Both matriculated and non-matriculated students may enroll in non-credit courses. Selected non-credit courses have registration fees, which are retained by the College. The bill adjustment schedule for non-credit courses is as follows.

Percentage of Costs Credited To Bill	Conditions	Length of Course
100%	Course cancelled by the College	Any length
100%	Student withdrawal prior to the start of course	Any length
80%	Within 10% of instructional time	Over 15 hours
50%	10-25% of instructional time	Over 15 hours
0%	Over 25% of instructional time	Over 15 hours
0%	After start of instructional time	Less than 15 hours

Bill Adjustment for Workshops, Seminars, and Conferences*:* Full refunds will be issued for seminars, workshops and conferences if notice is received 5 days prior to the day of the program. A non-refundable registration fee may be charged for workshops, seminars, and conferences.

If, for unusual circumstances (i.e. medical problems, death in the family), a student withdraws from a non-credit course, workshop, seminar, or conference, and if a student so requests, a credit for a future offering of the same course, workshop, seminar, or conference may be given at the discretion of the program coordinator in place of the bill adjustment.

Bill Adjustment for Customized Training*:* The College offers a number of customized training activities through special contracts for businesses. The conditions of bill adjustments are negotiated with the individual businesses.

FINANCIAL AID INFORMATION

The Student Aid Office reviews requests for financial aid after applicants have been admitted to the College. The office administers a variety of programs to help students finance their education.

FINANCIAL AID APPLICATION PROCESS

Each year students complete a Free Application for Federal Student Aid (FAFSA). Priority awards are made to students whose applications are filed before May 1; late applications will be reviewed and awarded based on funds available after all on-time applicants are awarded. The FAFSA worksheet is available at high school guidance offices as well as the College's Student Aid Office. Students should file the FAFSA electronically at www.fafsa.ed.gov. If a student does not have internet available, please call the Student Aid Office at 207-974-4625 for assistance.

All financial aid applicants are considered without regard to age, gender, race, ethnic origin or physical ability, except in those cases where aid is intended to rectify a prior or existing imbalance in minority or other group participation in the education process.

Special Notes:

1. Students who extend their studies beyond two years may be enrolled less than full-time at some point in their program of study.
2. Less than full-time student status can affect financial aid.

TYPES OF FINANCIAL ASSISTANCE

Federal Pell Grants are need-based Federal grants which are available to students pursuing their first undergraduate degree.

Federal Supplemental Educational Opportunity Grants (SEOG) are Federal funds available to students awarded a Federal Pell Grant with highest financial need.

Eastern Maine Community College Grants are based primarily on financial need or specific grant criteria. They include but are not limited to: EMCC Grant; Osher I; II; III; V; Rural Initiative Child Care Grants; EMCC Child Care; Hope Milliken McNally; SkillsUSA; Phi Theta Kappa;

Foundation and Endowed Scholarships. More information about our specific grants/scholarships is available on *MyEMCC*.

State of Maine Grants are need-based grants for Maine residents who file a FAFSA by May 1 and meet the annual family contribution cutoff as established by the Financial Authority of Maine.

Federal Work Study provides Federally-funded student employment on the campus. Jobs may provide work experience, as well as regular

Student income for educational expenses. Students are limited to part-time work on the College campus and eligibility is based on need and available funds.

Federal Subsidized Direct Loans taken while enrolled at EMCC are based on financial need. Interest rate is set on July 1 each year. Interest is deferred while the student is continuously enrolled at least half time (6 or more credits). Borrowers begin repayment of principal and interest within six months of the end of their half time or greater enrollment.

Federal Unsubsidized Direct Loans taken while enrolled at EMCC are not based on financial need. Interest rate is set on July 1 each year. Interest accrues on the loan while attending EMCC. Borrowers begin repayment of principal and interest within six months of the end of their half time or greater enrollment.

VETERANS' BENEFITS

Students who plan to receive veterans' benefits must see the College's VA Certifying Official to initiate paperwork. Veterans' benefits include Montgomery GI Bill-Active Duty (Chapter 30), Post 9/11 (Chapter 33), Montgomery GI Bill-Selected Reserve (Chapters 1606), Reserve Educational Assistance Program (REAP/Chapter 1607), Survivors' and Dependents' Educational Assistance Program (DEA/Chapter 35).

All Eastern Maine Community College credit bearing degree and certificate programs have been approved by the Maine State Approving Agency for Veterans Education Programs. Most non-credit courses and programs are not approved. (Exception: Maine Oil Dealers Association High Pressure Boiler Course.) Students receiving veterans' educational

assistance are required to have all their previous post-secondary educational experiences evaluated for transfer of credit **prior** to certification of their veteran's benefits. Additional information concerning veteran's benefits is available at the Enrollment Center.

Degree Status: To receive VA educational benefits, a veteran must apply for admission to a specific academic program. Special Note: Only courses that fulfill academic program requirements within their specific academic program are used to determine the number of credits approved for benefits by the VA.

Request for Certification*:* Students who receive VA educational benefits must complete and submit a Request for Semester Certification each time they register for courses. If the student's Request for Semester Certification is not submitted at least sixty days prior to the beginning of the semester, it will cause a delay in the arrival of the benefit check.

Veterans Continuous Pay*:* Veteran/dependent students enrolled in six or more credit hours will receive continuous pay between semesters provided there is not more than a thirty-day break in class attendance between the ending of one semester and the beginning of the following semester.

NATIVE AMERICAN TUITION WAIVER

Eastern Maine Community College waives tuition for eligible matriculating Native American students, less any Federal/State scholarship or grant funds. This tuition waiver is for any regular credit-bearing course that is part of the student's academic program.

To apply for this tuition waiver, the student must:

- annually complete a Free Application for Federal Student Aid, **and**
- be admitted to a credit-bearing academic program at EMCC (apply online for admission at www.emcc.edu), **and**
- complete an application for the waiver (Native American Program Agreement Form) located on the Financial Aid web page, www.emcc.edu, **and**

- complete the Native American Tuition Waiver Form and obtain Tribal Certification located on the Financial Aid webpage, www.emcc.edu

SENIOR CITIZEN TUITION WAIVER

Eastern Maine Community College allows for Maine residents 62 years of age and older to register for credit courses on a space available basis, tuition free. The waiver does not cover lab and other fees. Enrollment in specific courses is conditional on the approval of the Dean of Enrollment Management.

WITHDRAWAL FROM EMCC AND FINANCIAL AID ADJUSTMENTS

Financial aid funds are awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded. A student begins **earning** Federal funds on his or her first day of class attendance. If a student withdraws from the College during the semester, the student may no longer be eligible for the full amount of Federal funds that the student was originally awarded (scheduled to receive).

If a recipient of Federal grants or loan funds withdraws from the College after starting classes, the amount of Federal grants or loan assistance **earned** by the student must be determined. Up **through the 60% point** in each semester (payment period or period of enrollment), a pro rata schedule is used to determine the amount of Federal funds the student has earned at the time of their withdrawal. **After the 60% point** in the semester (payment period or period of enrollment), a student has earned 100% of the Federal funds he or she was scheduled to receive during the semester.

For a student who withdraws after the 60% point-in-time, there are no unearned funds. However, the College must still determine whether the student is eligible for a post-withdrawal disbursement. If the amount disbursed to the student is greater than the amount the student **earned,** the unearned funds **must be returned**.

***Special Note**: If any Federal aid was disbursed directly to the student, s/he is responsible for returning unearned funds to the Federal financial*

aid programs within a timely manner. Failure to do so may result in the student's ineligibility for future Federal student aid.

If the amount disbursed to the student is less than the amount the student earned, and for which the student is otherwise eligible, he or she is eligible to receive a post-withdrawal disbursement of the earned aid that was not received.

Federal financial aid includes: Federal Pell Grants, Federal SEOG, Federal Direct Loans (subsidized and unsubsidized), and PLUS Loans. Federal Work Study is excluded. For Title IV eligible students who officially withdraw from the College, the withdrawal date is either the date the student began the College's withdrawal process, or officially notified the Academic Affairs Office of intent to withdraw.

Per Federal regulations, if the student does not officially withdraw from the College (see section in catalog on Withdrawal from the College), a withdrawal date is established by the College to be either the midpoint of the semester or a date determined by documented academically-related activity. A student who did not officially withdraw and fails to earn any academic credit for a semester will be considered to have unofficially withdrawn at the midpoint of the semester. Federal financial aid will be adjusted, unless the student is able to prove completion of at least one semester-length course. Adjustments to Federal financial aid will be made within 45 days of the date that the College determines the student has withdrawn. Additional information about the return of Title IV Federal student aid and withdrawal from the College is available from the Student Aid Office.

Note: When a student withdraws from the College, any unpaid student charges are still owed to the College.

STUDENT SERVICES INFORMATION

COLLEGE STORE

The College Store, located in Maine Hall, offers textbooks, supplies and laptops, and carries a variety of Eastern Maine Community College clothing, gifts, and health and beauty aids. The store is open the following hours during the fall and spring semesters:

- Monday and Wednesday – 7:30 a.m. – 6 p.m.
- Tuesday and Thursday – 7:30 a.m. – 5 p.m.
- Friday – 7:30 a.m. – 3 p.m.

During the first week of classes, the College Store is open 7:30 a.m. – 6 p.m. Monday through Thursday and 7:30 a.m. – 3 p.m. on Friday.

COMPUTER LABORATORIES

Several computer facilities are available to students when not used for classroom instruction. In addition, computers are available in the library, technology departments, and the Maine Hall lobby near the Business Office. Computers are also available at the off-campus centers. Students are encouraged to use these facilities and to become familiar with the policies and procedures governing their use.

LIBRARY

The Eastern Maine Community College Library is located on the second floor of Katahdin Hall and is open 60 hours a week. The Library is wireless and offers the following:

- Books for research and leisure reading
- Computer access
- Laptops you can take out of the Library
- Group study rooms
- FitDesks
- Stand Up Power Bars
- Quiet study environment
- Color printer and copier
- Scanner
- Special events including art receptions
- Free Interlibrary loan service

- Library tours
- Course reserves
- Research assistance including citation help

The Library website found at http://emcc.libguides.com/emcclibrary offers thousands of online resources available 24/7 including:

- E-books for research including Ebrary and Credo ebooks
- E-journals
- E-newspapers
- Flipster E-Magazines
- Citation help including NoodleTools and APA/MLA handouts
- Library tutorials
- Research tips
- Subject guides
- E-books for leisure reading including Kindles and other e-readers
- Chat and Text research Help
- Schedule a research appointment from the Library website

Staff librarians are happy to assist students with any questions. An EMCC ID is required to check out materials from the Library and access them online. A student's library barcode is 2644000 + EMCC ID number. The Library is open Monday-Thursday from 8 a.m. to 9 p.m., and Friday from 8 a.m. to 5 p.m. during the academic year. Break and summer hours change and are posted on the Library website.

Phone: 207-974-4640 Text: 207-245-1351
Email: ask@emcc.libanswers.com

OUTPATIENT HEALTH SERVICES

Eastern Maine Community College offers student outpatient health services through the Penobscot Community Health Center's Brewer Medical Center, located at 735 Wilson Street in Brewer. These services are free of charge to all Eastern Maine Community College students who set up their appointments with the Dean of Student's Office, or by showing their student identification cards at the walk-in office, also located at 735 Wilson Street in Brewer. Appointments are mandatory to receive services, unless the student chooses to utilize the walk-in clinic.

Charges will be due for immunizations, lab tests, x-rays, and other medical procedures.

Eastern Maine Community College does not offer on-campus health services. Services provided by Penobscot Community Health Center include: treatment of acute illnesses, treatment of injuries, counseling and testing for various health-related issues, and referrals as needed.

COUNSELING SERVICES

Fully aware that the value of the college experience for students is greatly affected by personal problems, needs, and interests, the administration and faculty regard counseling services as an integral part of the total educational program. The following counseling services are available to our students:

Personal Counseling

Short-Term counseling is available to currently enrolled students through the Student Support Services Counselor. To schedule an initial counseling appointment, call 207-974-4858 or send an email to sking@emcc.edu. The counselor sees clients Monday – Friday by appointment. The counseling office is located at 124 Maine Hall.

Crisis services are available to students as well. If you should find yourself in crisis, there are several ways to connect to the counselor. First, call the counseling office at (207) 974-4858. If there is no answer, the following college employees can help you access the counselor:

- Any member of the campus security team (207-745-6090, Maine Hall – 146),
- Student Life staff members (207-745-4690, Maine Hall – 105),
- Student Success Center staff members (207-974-4887, Maine Hall – 121),
- TRiO staff members (207-974-4642, Maine Hall – 123),
- Resident Directors (207-974-4795/4696, Acadia and Kineo Halls).

Tell any of these employees that you are in crisis and need to speak with the counselor.

Alternatively, you may access the following services which are not affiliated with EMCC if you find yourself in crisis:

- The Maine Crisis Line, 1-888-568-1112 (free, confidential, available 24/7)
- The National Suicide Prevention Lifeline Network, 1-800-273-TALK (8255) (free, confidential, available 24/7)
- The Crisis Text Line, Text TALK to 741-741 (free, available 24/7)

***If you are having a mental health emergency, please call 911 or go directly to the nearest emergency room. ***

Career Counseling

Many students in college find themselves struggling to choose a career path or discover that their current degree program simply isn't a good fit. With so many career possibilities available, it can be overwhelming to make this important choice that will impact your working life. Career counseling can help students gain insight about career options that would be compatible with their values, abilities, and educational goals.

Students who wish to pursue career counseling at EMCC may make an initial consultation appointment with the Student Support Services Counselor to discuss concerns and determine the best approach to fit the student's needs. If the student is interested in continuing, they will commit to an additional three sessions, to allow for assessment, exploration, and planning. Career counseling is free to all currently enrolled EMCC students. To request an appointment, call 207-974-4858 or email sking@emcc.edu.

RECREATION AND GYM USAGE

Open gym is advertised for drop-in use by the College community. The Johnston Gym is open to all students offering a variety of activities, including recreational and intramural sports. These activities are free of charge with a current student I.D. card. All visitors and guests will need to pay a usage fee for each visit.

RESIDENCE HALLS

Acadia and Kineo Halls are chemical-free residence halls and provide housing for approximately 250 students. The halls are staffed with two

Resident Directors and eight Resident Assistants who offer help with personal and academic concerns. The Director of Residential Life, Activities and Student Engagement oversees the Residential Life Department. The McCorkill Dining Hall, located in Katahdin Hall, is open seven days a week during the academic year. Meal options are available for commuters, faculty and staff.

Additional services and regulations governing the residence halls are contained in the Residential Life Handbook that is available in the Director of Residential Life's Office as well as the lobby and Resident Directors' Offices in each hall.

STUDENT SUCCESS CENTER

The Student Success Center (SSC) located in Room 121, Maine Hall, empowers students to take personal responsibility for their learning by offering a variety of free services that students can access to help them succeed at EMCC. These services include academic support, disability support services, navigating success advisor, lunch and learn workshops, placement testing, supplemental instruction, and tutoring.

STUDENT SENATE

Student leaders seek to fulfill the Student Senate objectives which include promoting the general College welfare, serving the students' best interest, and helping to provide a lively college spirit. All students are invited to attend Student Senate meetings and provide ideas for the betterment of the College community. Student organizations and academic programs may petition the Senate for monies to carry out student-led initiatives and activities.

SUPPORT SERVICES FOR STUDENTS WITH DISABILITIES

The Student Success Center provides and coordinates services to students with documented disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. Students requesting accommodations must complete an intake meeting and submit supporting documentation to the Coordinator of Disability Services, located in Maine Hall, Room 121A in the Student Success Center, to be considered for accommodations.

TRiO STUDENT SUPPORT SERVICES PROGRAM

TRiO Student Support Services at EMCC is a Federally sponsored program, funded through the US Department of Education and was first created in 1968. The mission of TRiO is to assist low-income/first generation students as well as students with documented disabilities in persisting in and graduating from EMCC within four years. Where applicable, the program assists students seeking to transfer on to four-year colleges and continue their education. Services provided include individual and group tutoring in math, science, technologies, and English, as well as intensive mentoring, advising, and class registration. Assistance is offered in financial aid/scholarship/grant awareness and financial literacy assistance. Additionally, students are offered workshops and individual sessions on test/taking study strategies, career exploration, and building non-cognitive skills such as persistence, confidence, and self-advocacy. Further information is located on the TRiO website at http://www.emcc.edu/academics/trio/.

TUTORING

Eastern Maine Community College is committed to student success. In keeping with that philosophy, tutoring and other academic support services for Eastern Maine Community College students are available through the Student Success Center in Maine Hall. Arrangements for obtaining this type of assistance can be made directly through the Center.

STUDENT CODE OF CONDUCT

See current Student Handbook, which may be found in the Student Life Office, on the College website or in the Library.

RIGHT TO PRIVACY

The Family Education Rights and Privacy Act (FERPA) of 1974, known as the "Buckley Amendment," requires that Eastern Maine Community College obtain consent in writing before releasing your educational record, except to specified parties. The intent of the Act is to protect the privacy of students with regard to access to records and to providing release of such records. The opportunity for a hearing to challenge such records should be obtained from the Dean of Enrollment Management's Office, located in the Enrollment Center, Katahdin Hall. Third parties who

may have access to educational records of students without prior written consent include:

1. Eastern Maine Community College officials who have legitimate educational interests;
2. officials of other schools in which the student seeks or intends to enroll;
3. certain authorized Federal agencies;
4. persons in connection with the student's application for, or receipt of, financial aid;
5. organizations conducting studies for, or on behalf of, educational agencies or institutions;
6. accrediting organizations;
7. parents of a dependent student as defined by the Internal Revenue Code of 1954; and
8. judicial authorities.

Under the Solomon Amendment enacted in 1996, the College is required to provide directory type information for students at least 17 years of age upon request of representatives of the Department of Defense for military recruiting purposes.

The Office of Institutional Research and Student Data makes available the students' name, class, major, home address and local address as well as telephone numbers. You may request that your current year's directory information be suppressed from public distribution by contacting the Enrollment Center and completing the appropriate form no later than September 30 (January 31 for those students beginning their program of study in January) of the current school year.

If you request the public directory information be suppressed, then any request from parents, relatives, friends, student organizations, and all others who may wish to contact you will be denied. Only in emergency situations will we release information concerning your whereabouts to other than those persons authorized under the Act.

ACADEMIC INFORMATION

ACADEMIC HONESTY

Submitting the same work in more than one course without permission from the involved instructors, cheating, plagiarism, or otherwise receiving academic credit under false pretenses, are all serious offenses and may result in dismissal from the College. Instructors may dismiss such offenders from courses with the grade of "AF" and report the cases to appropriate department chairperson and the Vice President of Academic Affairs.

APPEALS PROCESS

The academic appeals process consists of the following steps. First, the student meets with the responsible faculty member. If resolution is not reached, the student meets with the department chairperson of the faculty member's department. The final point of appeal is the Vice President of Academic Affairs. Students should follow this process when concerned with a course grade and related course activities.

For an explanation of rights and responsibilities, students are also referred to the Student Code of Conduct located in the Student Handbook.

ACADEMIC ADVISORS

Matriculated students are assigned a faculty or professional staff advisor or core of advisors who assist students with curricular and scholastic matters and with adjustment to college, and who can refer students to appropriate College personnel for assistance. Students can view their advisor information on the *MyEMCC* student portal.

FULL-TIME/PART-TIME STUDENT STATUS

Students who are registered for at least 12 credit hours per semester are considered full-time students. Students who are registered for fewer than 12 credit hours per semester are part-time students. Students should note that most programs require more than 15 credit hours per semester in order to graduate in two years or less.

MATRICULATED STATUS

A student who is admitted to a particular program of study and who continues to make satisfactory academic progress is considered to be a matriculated student. Loss of matriculation status may carry financial aid implications.

MAXIMUM COURSE LOAD

No student will be permitted to enroll in more than 21 credit hours per semester without the permission of the Vice President of Academic Affairs.

PLACEMENT TESTING AND COURSE SELECTION

Eastern Maine Community College requires that students achieve minimum scores on the appropriate computerized placement tests before beginning the "standard" program courses. Identifying areas of skill weaknesses and having the opportunity to develop these skills is essential to successful program completion. If a student does not achieve minimum scores, s/he will be required to take preparatory courses.

GRADING SYSTEM

Grades are given as letters with the option of assigning plus or minus to represent levels of achievement. Letter grade designations include the following:

A	Highest honors
B	Honors
C	Satisfactory
D	Minimal passing grade
F	Failure to meet course objectives
P	Satisfactory completion of an ungraded course. No quality points for computation of grade point average (GPA) are assigned, but credit hours are applicable toward graduation requirements.
AF	Administrative Failure - Dropped from a course for reasons other than grade performance, such as not meeting course attendance requirements. The quality point value of this grade is zero points or the same as an

F grade and will be computed as such in the student's GPA.

W Withdrawal - Withdrawal from a course after add/drop (6 calendar days from the beginning of the course) to the midpoint (65 percent of the length of the course) for reasons of health or other extenuating circumstances. No value assigned, nor is it used in computing the GPA.

I Incomplete - All course work is expected to be completed by the end of the semester. In exceptional circumstances with faculty approval, students may be given an "I" (incomplete) grade if they fail to complete their coursework on time. It is the responsibility of the student to contact a faculty member when requesting a grade of incomplete. The faculty member will specify what work remains to be completed along with a deadline date and grade to be assigned if the coursework is not completed. If the course is not completed within the designated timeframe, the grade recorded by the instructor on the "Incomplete Grade Form" will be assigned to the student. All incomplete grades must be approved by the department chairperson and copies of the outstanding course requirements will be forwarded to the Vice President of Academic Affairs.

NG No grade at this time

AUDIT

Students may audit an Eastern Maine Community College course provided that they meet the course prerequisites. They must pay normal tuition and lab fees for the course. Students auditing a course receive no credit for that course. Their academic transcript will record the course with a grade of "AU" for audit. Permission to audit courses may be withheld due to class size limitations, as students taking courses for credit have first registration priority. Request to audit a course must occur within the add-drop period. Request to change status from credit to audit must occur by the mid-point of the semester.

GRADE POINT AVERAGE

Letter grades equal the following point values, which are used to calculate term and cumulative grade point averages (GPA):

A = 4.00	A- = 3.67	B+ = 3.33	B = 3.00	B- = 2.67
C+ = 2.33	C = 2.00	C- = 1.67	D+ = 1.33	D = 1.00
D- = 0.67	F = 0.00	AF = 0.00		

A grade point average is calculated by multiplying the quality point value (0.00 to 4.00) for the letter grade earned (A to F) by the number of credit hours per course. The products are totaled and are then divided by the total number of credit hours carried during the semester.

Grade point averages computed by the semester are referred to as term grade point averages. Grade point averages computed for all courses taken to date are referred to as cumulative grade point averages. Only Eastern Maine Community College courses are used to determine grade point averages.

PRESIDENT'S LIST

At the end of each semester the Academic Affairs Office prepares for the President a list of those full-time Dean's List students who have earned a grade point average of 4.0. Students may not be considered for the President's List if they have incomplete grades. The President offers special recognition to these students.

DEAN'S LIST

For the purpose of recognizing academic excellence among full-time matriculated students, each semester the Academic Affairs Office will prepare a list of those students who have earned a semester grade point average of 3.25 or higher with no course grade below a C. Students may not have incomplete grades to be considered for the Dean's List. Full-time students are registered for at least 12 credit hours for the semester.

HONORABLE MENTION LIST

Eastern Maine Community College recognizes and applauds the academic accomplishments of its part-time students through the Honorable

Mention List. All of the following criteria must be met for a student to be eligible for the Honorable Mention List:

- Must be matriculated;
- Must be enrolled in 6-11 credit hours;
- Must have earned a C or higher in every course;
- Must not have any incomplete grades for the semester; and
- Must have earned a semester grade point average of at least 3.25

ACADEMIC WARNING

Students who earn a term grade point average of less than 2.0 for any semester will receive an academic warning. Students on academic warning must: 1) develop a personal academic plan with their academic advisor; and 2) consult with their academic advisor prior to registering for the following semester courses.

ACADEMIC PROBATION

Academic probation is a means of identifying those students who are in academic jeopardy, and must show academic improvement in order to continue their studies. Probationary status will be determined by cumulative grade point averages below 2.0 at the end of any semester. Student permanent records will carry the words "Academic Probation" with the semester of probation. Probationary status is removed when students raise their grade point average to 2.0 or higher.

Students on Academic Probation are required to:

1. consult with an academic advisor prior to registering for the following semester courses;
2. carry less than a normal credit load while on Academic Probation; and
3. meet with an advisor monthly during the semester to develop an academic plan for improving their academic standing and discuss their academic progress.

ACADEMIC DISMISSAL

A student will be dismissed for failure to earn the minimum acceptable ***cumulative*** GPA below:

a. less than a 0.50 GPA for up to 15 credit hours attempted
b. less than a 1.75 GPA for 15.1 to 30 credit hours attempted

c. less than a 1.90 GPA for 30.1 to 45 credit hours attempted
d. less than a 2.00 GPA for more than 45 credit hours attempted

Additionally, a student must complete 67 percent of all cumulative attempted credits with a grade of 1.33 or higher; otherwise, the student will be dismissed.

Students who have withdrawn from the same course more than twice are required to meet with the Vice President of Academic Affairs. If appropriate, the Vice President may choose to dismiss the student.

Students may also be dismissed for violations of the Student Code of Conduct.

Dismissed students will receive notification in writing from the Academic Affairs Office, and the transcript of those students will carry the words "Academic Dismissal," with the semester of dismissal. Dismissal requires students to be un-enrolled for a minimum of one semester. Students may appeal the dismissal decision to the Vice President of Academic Affairs.

MID-SEMESTER GRADES/ACADEMIC WARNINGS

At the mid-point of each semester, the Academic Affairs Office may notify in writing those students whose grades are failing or near failing. These students are encouraged to meet with their instructors and/or department chairperson to discuss course work improvement and to use the services of the Student Success Center. Mid-semester grades become part of a student's permanent records; however, they are not recorded on official academic transcripts.

GRADE REPORTS

Students are responsible for accessing their final course grades online using the *MyEMCC* portal at www.emcc.edu. Grades are not mailed to students.

TRANSCRIPT OF ACADEMIC RECORD

The Office of Institutional Research and Student Data maintains the official academic record of each student in perpetuity. Transcripts of

these records are not furnished to individuals, other institutions, or prospective employers without the written consent of the student. Each graduate receives one complimentary official transcript with the diploma. Transcripts are $5 per request (up to two copies) and $1 for each additional copy. Expedited transcripts (within a 24-hour turnaround time) are $10 (prepaid) and faxing any transcripts costs $10 (prepaid). These fees are not refundable.

No partial transcripts or copies of transcripts from other institutions (including high schools) are issued. Voice or e-mail requests will not be honored, as a signed Transcript Request Form must be submitted in order to provide a transcript.

Transcript Request Forms are available in the Enrollment Center located in Katahdin Hall and online at www.emcc.edu. A student may mail or fax a signed request to the Office of Institutional Research and Student Data. The fax number is 207-974-4683.

ADDRESS and NAME CHANGE

To ensure that our students receive all correspondence from the College, we request that students notify the Enrollment Center immediately of any change in their name, address, or contact information. To make a name change, the student should provide their updated social security card. The Enrollment Center is located in Katahdin Hall. Address and phone number changes may also be completed online through the student's *MyEMCC* account.

EXPUNGING RECORDS

Only the official academic record maintained by the Office of Institutional Research and Student Data is officially designated as a permanent record. Other records can be expunged at the discretion of a specific department where the record resides. For example, the Student Aid Office expunges records five years after the student's last academic year of attendance. Immunization documentation will be destroyed five years after last attendance. Access rights shall be honored prior to the destruction of records if the student has requested such access.

Academic departments which maintain educational records may have specific policies regarding access to and retention of such records which are consistent with FERPA. Students seeking information about those specific policies should contact the specific department or office which is the custodian of that record.

TRANSFER OF CREDIT FROM EASTERN MAINE COMMUNITY COLLEGE TO OTHER COLLEGES AND UNIVERSITIES

Eastern Maine Community College is accredited by the New England Association of Schools and Colleges, Inc.(NEASC), therefore, most academic credits will transfer to other colleges and universities. General education courses usually transfer more easily than technical courses. The receiving school has the right to determine whether or not credits will transfer.

EMCC has developed articulation agreements with four-year colleges and universities to provide seamless transfer opportunities for students moving on to earn a Bachelor's Degree. More detailed information can be found on our website http://www.emcc.edu/beyond-emcc/transfer-agreements/

PRIOR LEARNING ASSESSMENT

Prior Learning Assessment (PLA) is a process by which an individual's learning from experience that is equivalent to college-level coursework is assessed and evaluated for purposes of granting credit. College-level is deemed as learning that is a level of achievement equal to subject areas traditionally taught in colleges and is commonly recognized among colleges.

PLA may be awarded in two broad categories: credit by examination and credit by assessment A maximum of 75% of the total required credits with significant credit in the major field may be earned through PLA or transfer. Credit for prior learning can be awarded only after the assessment of prior learning experiences and only for documented learning that demonstrates achievement of the identified learning outcomes for a specific course or courses. Students wishing to transfer to another college or university should check with the receiving institution to determine whether PLA credit will be accepted for transfer.

In cases where nationally-recognized examinations and certification are provided, EMCC will award credit by the standards generally accepted among colleges. Such examinations include:

- College Board Advanced Placement (AP)
- College Level Examination Program (CLEP)
- DANTES Subject Standardized Test (DSST)
- International Baccalaureate (IB)
- Foreign Language Achievement Testing (CLEP, FLATs, NYU)

Where a nationally recognized exam is not offered or appropriate, EMCC may offer a challenge exam. These faculty-constructed exams could cover a wide variety of curricula from general education to technical courses and may be paper- or computer-based or a practical examination. The acceptable scores for awarding credit will be based on a collaborative decision of faculty experts.

More information is available at:
http://www.emcc.edu/academics/prior-learning/

ATTENDANCE, ABSENCES

Students are expected to be punctual and to attend all scheduled classes, laboratory periods, shop activities, and clinical experiences or field work. Faculty members (1) set specific attendance requirements for their classes, (2) file copies of attendance requirements with the Academic Affairs Office, and (3) communicate those requirements to students during the first class meeting of each course.

Students are responsible for all course requirements, regardless of reason(s) for absences. Make-up of academic requirements occurs at the discretion of faculty members.

Written warnings from instructors indicate they are considering dropping students from courses for non-compliance with written policies. Students may be dropped from courses, and a grade of “AF” will be automatically assigned.

REPEATING A COURSE

A course may be attempted no more than twice without prior approval of the Vice President of Academic Affairs and in consultation with the program department chairperson and faculty member. For credit courses, the last grade (regardless 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 for determining completion of degree requirements. All grades will remain on the student's record. The repeated course will count only once toward graduation requirements, provided the grade meets requirements.

ADD/DROP AND COURSE WITHDRAWAL

Eastern Maine Community College offers courses within various timeframes. As a result, both add/drop and course withdrawal periods differ in length, according to the course in question.

ADD/DROP

For fifteen- and sixteen-week semesters, the add/drop period will be the first six (6) calendar days of the semester. For periods shorter than 15 weeks, the add/drop period will be the first 10% of classes. Courses can be added outside this time frame only for exceptional circumstances with the instructor's permission. Special Note: Financial aid and VA benefits are based on the total credits a student is registered for at the end of the add/drop period.

During this period, students may change their academic schedules with the approval of the appropriate advisor. A change is considered official only after Enrollment Management has received it. Courses dropped from student schedules during the add/drop period will not appear on transcripts.

COURSE WITHDRAWAL

The withdrawal period begins after add/drop and ends at the 65% point of the course. Courses dropped during the withdrawal period will reflect a "W" on the transcript. After the withdrawal period, students who stop attending will receive an "AF" or "F". **To properly withdraw from a course, the student MUST complete a course withdrawal form.**

Students who withdraw from technology classes during a semester will remain enrolled in their academic program through the end of that semester. If students intend to take classes in the following semester as matriculated students, they must contact the Admissions Office to request an extension of their academic program, or apply for and be accepted to another academic program at the College.

Special Notes:

1. Financial aid is not adjusted if a student withdraws from a class after the add/drop period.
2. VA benefits are adjusted if a student withdraws from a class anytime during the semester. Their enrollment change is reported to the Veterans Administration and can result in an adjustment to their monthly stipend as well as the possibility of their obligation to repay benefits to the VA.

SATISFYING PROGRAM REQUIREMENTS

Students are responsible to monitor their degree program requirements and to plan their schedule of courses accordingly. They should check with their academic advisor, before making any change to their schedules. **Students are responsible to meet all graduation requirements of their academic program.**

GRADUATION

Requirements: Eastern Maine Community College will grant associate in applied science degrees, associate in science degrees, associate in arts degrees, advanced certificates, and certificates to those students who have:

1. passed all prescribed courses required in their program with a minimum cumulative GPA of 2.0;
2. passed all courses within their major area of study with a minimum cumulative GPA of 2.0; and
3. paid all bills.

Application for Graduation*:* All students are required to complete an Application for Graduation. To apply for graduation, visit *MyEMCC* and fill out the Graduation Application.

Attendance at Graduation*:* Students who have fulfilled the requirements for graduation or are within six (6) credit hours of completing program requirements may participate in commencement exercises. Graduation documents and official transcripts will be mailed after commencement.

Students who complete their course requirements after the May commencement (for example, after the summer or fall semesters) must notify the Vice President of Academic Affairs to initiate the process for approving their credential.

Awards of Excellence*:* During each commencement exercise, those students who have excelled both personally and academically within their program receive the Excellence in Technology awards. Usually one student in each technology receives this award. Phi Theta Kappa members and students graduating with honors (cumulative grade point averages of at least 3.25) are also recognized.

Awards of Excellence and other recognitions of achievement require that a student earns 75% of credits from courses taken at EMCC.

Graduating with Honors/High Honors*:* Graduating students meeting a 75% residency requirement at EMCC will be eligible for the awards of Honors and High Honors if they attain the requisite cumulative GPA. The Honors award requires a cumulative GPA of 3.25-3.74; the High Honors award requires a cumulative GPA of 3.75-4.00.

CHANGE IN PROGRAM/LEVEL

Change of Level*:* With the permission of the Director of Admissions, students enrolled in programs offering more than one level of instruction may change from one level to another.

Change of Program*:* Enrolled students wishing to be considered for a different program of study must apply through the Admissions Office. Those decisions involve available space, academic preparation, and commitment to the desired program. However, the change of program would not take effect until the following semester.

BREAK IN ENROLLMENT

Matriculated students who do not enroll in program-specific courses each consecutive semester until the completion of all program requirements may be withdrawn from their program as a result of the break in attendance. Students who have been withdrawn otherwise in good standing with Eastern Maine Community College are asked to discuss their intent to re-enroll with an Admissions Counselor. Students may be required to complete an Application for Readmission (SNAP-APP). Re-entry into certain courses and/or programs will be on a space-available basis.

WITHDRAWAL FROM THE COLLEGE

Students who decide to withdraw from Eastern Maine Community College must obtain and complete a "Student Status Change Form" from the Academic Affairs Office. Failure to follow this official withdrawal process may result in failing grades recorded on the student's academic transcript.

Non-attendance of classes is not considered withdrawal and jeopardizes a student's academic record and eligibility for a refund of tuition, refundable fees, or room and board costs. Students who live on campus must follow the check-out procedure identified in the Residential Life Handbook.

READMISSION AFTER DISMISSAL OR WITHDRAWAL

Students who withdraw from Eastern Maine Community College while failing one or more courses or who are dismissed for academic reasons, will not be readmitted any sooner than one academic semester from the date of withdrawal/dismissal. Students who are dismissed for academic reasons may appeal their dismissals to the Vice President of Academic Affairs who will then (1) allow the dismissal decision to stand, (2) reverse the decision, or (3) readmit them under specified conditions.

Students dismissed for academic reasons may enroll, with the approval of the Vice President of Academic Affairs, in specific courses in order to remove deficiencies that may have resulted in the dismissal.

Special Note: The decision of the Vice President of Academic Affairs to permit a student to return to classes, does not automatically restore the student's financial aid eligibility. Refer to the College Financial Aid web page for an explanation of Federal regulations regarding Satisfactory Academic Progress for financial aid recipients.

LEAVE OF ABSENCE

A matriculated student in good academic standing may apply for and receive a Leave of Absence (usually no longer than a year) while maintaining status in his or her degree program. If a student is in the first semester of study, the Leave request will be reviewed at the end of the semester when grades are available. A student may not request a Leave of Absence for the semester in which he or she is enrolled. Students wishing to return from a Leave of Absence are required to submit an Application for Readmission(SNAP-APP) with the Admissions Office to indicate their interest in returning.

Re-entry into the technology courses is on a space-available basis. Further information and necessary forms may be obtained in the Academic Affairs Office.

STUDENTS CALLED TO ACTIVE MILITARY SERVICE

Eastern Maine Community College recognizes the educational rights of its students who are called to active military duty. Students who (either voluntarily or involuntarily) enter active military service during time of national or international crisis will be eligible for financial credit for their course work. Students must call or meet with the Vice President of Academic Affairs prior to departure to discuss the reasons for entering active military service and complete the appropriate withdrawal form. Readmission to the student's program is based on space availability.

PHI THETA KAPPA INTERNATIONAL HONOR SOCIETY

The purpose of Phi Theta Kappa is the recognition and encouragement of scholarship among associate degree students. To achieve this purpose, Phi Theta Kappa provides opportunities for the development of leadership and service, an intellectual climate for exchange of ideas and ideals, lively fellowship for scholars, and stimulation of interest for continuing academic excellence.

Membership is extended by invitation. To be considered for membership, a student must:

- be enrolled during the semester that the invitation is being extended;
- have completed a minimum of 12 academic credit hours (in 100 level courses);
- have a grade point average of 3.5 or higher;
- be of good moral character and possess recognized qualities of citizenship; and
- be recommended by the department chairperson.

Membership is recognition of intellectual achievement while students are enrolled in college, as they continue their education, and as they seek employment. Membership avails opportunities for leadership and service locally, regionally, and nationally.

The membership fees are the sole resource by which Phi Theta Kappa is able to provide educational and cultural programs and services for its members.

STUDENT EXCHANGE EXPERIENCES

Eastern Maine Community College will offer up to three (3) college credits for student exchange experiences in other countries. In order to earn credit, students are required to satisfy predetermined goals and objectives. Sixty (60) hours of on-site experiences will be worth one (1) credit hour, with a maximum of three (3) credit hours for any single exchange experience. The final grade will be pass or fail.

COMPUTER USE POLICY

Purpose: To promote and ensure the responsible use of computers by or through Eastern Maine Community College.

EMCC seeks to enhance opportunities for individual and collaborative learning and research. As a public institution with limited resources and distinct policy and legal obligations, EMCC also needs to ensure that such uses are consistent with those resources and obligations. The goal of this Policy is to balance these interests and promote responsible and secure use for all.

APPLICATION

This policy applies to:

1. each Center and any other entity of EMCC;
2. all computing resources owned or operated by EMCC including, but not limited to, all hardware, software, peripherals, networks, network components, accounts, physical and logical data, e-mail and all other data or information transmitted by such equipment ("computers");
3. all employees, students and other persons who use such computers ("users"); and
4. in addition to any other computer use policy adopted by entities of EMCC, and by entities outside EMCC that operate resources accessed through or from EMCC.

GENERAL RULES

Educational Priority - The priority use of EMCC's computers is to provide direct support for learning, teaching and administration of programs. Such priority will govern access to EMCC's computers.

Use is a Privilege, not a Right*:* Users do not have a right to use EMCC computers or accounts thereon. Users are granted a privilege to use such computers and accounts. This privilege is limited by the provisions of this Policy, any other pertinent policy or law, and may be withdrawn for violation thereof.

Limited Right of Privacy*:* Users may not have an expectation of privacy in their use of EMCC's computers or networks. For example, EMCC reserves the following rights:

1. Periodic Network Monitoring. EMCC reserves the right to monitor periodically, randomly and without notice use rates, patterns, speed and system capacity to ensure the efficiency or integrity of the EMCC network and its computers. Such monitoring may proceed only by a person expressly authorized by the College President.
2. Inspection of a Particular Account or Computer. EMCC reserves the right to inspect for reasonable cause those accounts, computers or files that EMCC has reason to believe are misused, corrupt or damaged. Such inspection may proceed only by a person expressly authorized by the College President and as advised by the MCCS General Counsel.
3. Search and Seizure by Law Enforcement Agencies. User accounts, computers or files may also be subject to search and seizure by law enforcement agencies for law enforcement purposes.

Time, Manner and Place Limitations*:* EMCC reserves the right to limit certain uses on or through EMCC computers at those times and locations that EMCC determines are necessary to regulate system capacity and speed. These limitations apply, but are not limited, to download of video, music, photographic and other large data files.

Examples of Specific Prohibitions:
Conduct that violates this Policy includes, but is not limited to, the following:

- unauthorized access to computers;
- unauthorized use of a computer account;
- connecting unauthorized equipment to the EMCC network;
- unauthorized attempts to circumvent data protection or security including, but not limited to, creating or running programs that identify security loopholes or decrypt secure data;
- knowingly or recklessly performing an act that will interfere with the regular operation of a computer;
- knowing or recklessly running or installing a program that, by intent or effect, damages a computer, system or network (this includes, but

is not limited to, programs known as computer "viruses", "Trojan horses" and "worms");

- knowingly or recklessly wasting computer resources;
- knowingly or recklessly overloading computer resources, such as running excessive programs that use relatively substantial bandwidth and other resources (this includes, but is not limited to, peer-to-peer applications);
- violating terms of applicable software licensing agreements;
- violating copyright laws, including their fair use provisions, through unlawful reproduction or dissemination of copyrighted text, images and other protected materials;
- using System computers for commercial activity, such as selling products or services;
- using electronic mail to harass or threaten another person or organization;
- initiating or perpetuating electronic chain letters or unauthorized mass mailings (this includes, but is not limited to: multiple mailings to news groups, mailing lists or individuals; "spamming;" "flooding;" and "bombing");
- forging the identity of a person or computer in an electronic communication;
- transmitting or reproducing materials that is libelous, slanderous or defamatory;
- displaying, downloading, printing or distributing obscene, lewd, sexually explicit or sexually offensive images or text in a manner that constitutes sexual harassment or other violation of law;
- unauthorized monitoring of another user's electronic communications; or reading, copying, changing or deleting another user's files or software without authority; and
- otherwise violating existing laws or EMCC policies.

Enforcement*:* Violation of this Policy may result in the loss of computing and/or network access; other disciplinary action; or appropriate civil or criminal legal action.

Security: The EMCC Dean of Information Technology shall work with the MCCS Director of Finance and Administration to develop and adopt

standards that provide adequate uniform security for all System computers and networks.

EMCC CENTER FOR BUSINESS SERVICES

Eastern Maine Community College's Center for Business Services serves the community as an economic and workforce resource. The Center is responsive to the education and training needs of the Tri-County Region (Penobscot, Piscataquis and Hancock Counties), and works with businesses and community partners to address workforce growth, training needs, professional development, and education.

SERVICES

Customized Trainings*:* EMCC offers a wide range of training programs that can be customized to fit the needs of local businesses and organizations. Training topics include technical trades, soft skills, management and leadership, communication and more. Courses can be offered for credit, continuing education units, or non-credit depending on the needs of the business.

Non-credit Courses and Certifications*:* EMCC offers a variety of general non-credit courses in both technical and professional development fields. These often prepare students for certification exams that result in industry-required licensures.

Maine Quality Centers*:* Maine Quality Centers is a program of the Maine Community College System that offers grant funding for customized training received through any of Maine's seven community colleges. Funding is available for new employee training resulting from business expansion and incumbent worker training for existing employees.

Welding Test Center*:* The Welding Test Center is an independent materials testing laboratory that provides mechanical testing services for industry. Other services include welding/brazing procedure specification development, welding/brazing procedure qualification testing and welder/brazer performance qualification testing to all major welding codes, developing individual company welder qualifications, and code

and welding consultation services. The Center is accredited by the American Welding Society, the Maine Department of Transportation and the Maine Department of Labor - Boiler Division. The Welding Test Center holds membership with: American Society of Mechanical Engineers (ASME), American Society of Non-destructive Materials (ASNT), American Society of Testing Materials (ASTM), American Society of Materials (ASM), Maine Marine Trades Association, and Manufactures' Association of Maine. For more information visit http://www.weldingtestcenter.org/

ACADEMIC PROGRAMS

ESSENTIAL LEARNING OUTCOMES

All graduates of associate degree programs at Eastern Maine Community College will improve their initial skills in the following common learning objectives:

- **Communication*:*** Graduates effectively convey ideas to others using graphics, speech and writing, while sources (if any) are handled appropriately, and content, mechanics, and presentation are clear and appropriate to the assignment.
- **Teamwork:** Graduates work effectively in teams with individuals from diverse backgrounds to achieve a goal. Graduates work collaboratively and in a timely manner to ensure that all members participate in accomplishing the task and provide constructive feedback when conflicts arise.
- **Independent Learning*:*** Graduates access, evaluate, and synthesize information independently using appropriate technology, and select information relevant to the assignment, then organize and synthesize it clearly.
- **Problem Solving*:*** Graduates can interpret manuals and reports, use numerical literacy skills, scientific methods, and/or logic to first separate the symptoms from problems and then to work through the details of the problem to seek a solution.

GENERAL EDUCATION COURSES BY CATEGORY

Most program requirements include restricted electives which include any 100+ level or higher course with the specified prefix. Elective courses by category are:

- **Humanities:** The study of literature, language, philosophy, and fine arts to analyze values, to stimulate speculation and creativity, and to explore the meaning of human existence.
- **English (Writing Intensive or Communication):** The study of the skills of discourse—collecting, preparing, and presenting ideas in written and oral form.
- **Mathematics:** The study of numbers and their operations, measurement, and relationships, and the use of computational methods in problem solving.

- **Science:** The study of life and physical sciences directed toward the application of the scientific method of inquiry to natural phenomena.
- **Social Science*:*** The study of psychological, social, historical, and political behavior directed toward an understanding of human continuity and change.

HUMANITIES	COMMUNICATIONS	MATHEMATICS	SCIENCE	SOCIAL SCIENCE
Literature	ENG101	MAT	BIO	ECO
ENG112	ENG116		CHE	GEO
ENG222	ENG151		CHM	GIS
ENG223	ENG162		NUT	HIS
ENG224	ENG172		PHY	PSY
ENG225	ENG205		SCI	SOC
ENG227	ENG215			
ENG228	SPE101			
ENG233				
ENG235				
ENG241				
ENG243				
Fine Arts				
ART				
ENG212				
ENG214				
HUM				
MUS				
Philosophy				
PHI				
Language				
ASL				
KOR				

Automotive Technology

Credentials:

Associate in Applied Science Degree (65 credit hours)
Certificate (33 credit hours)

Academic Requirements for Admission:

A.A.S. Degree: High School Level Algebra I required. Algebra II, Geometry, and either Physics or Chemistry with Lab desired.
Certificate: High School Level Algebra I required.

Program Overview:

The Automotive Technology program provides theoretical foundations, practical education, and work experience in the engineering, testing, servicing, troubleshooting and repairing of automobiles. The program is accredited by the National Automotive Technicians Education Foundation (NATEF), a division of ASE, as a Master Automotive Program in all eight areas of Automotive accreditation. The curriculum follows the NATEF standards, which helps students to prepare for ASE technician certification tests.

Graduates are employed as automotive service technicians, sales personnel, service managers, maintenance supervisors, service writers, warranty claims adjusters, and parts persons.

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree will function at an entry-level position for servicing, diagnosing, repairing, and creating work orders in the following areas:

- Explain and apply the legal requirements of OSHA, EPA and the State of Maine when performing the duties of a technician.
- Use acceptable public relations and customer service techniques.
- Diagnose, repair and document components of electrical/electronics, heating, ventilation and air conditioning.
- Diagnose, repair and document automotive engines and powertrain systems.
- Diagnose, repair and document components of automotive suspension and steering systems.

- Diagnose, repair and document components of hydraulic and anti-lock brake systems.
- Analyze and complete a Maine state motor vehicle inspection.

Students are tested with standard written tests as well as hands-on testing that coincide with the assigned textbook, NATEF standards, as well as industry standards in each area. Students must pass Automotive courses with a grade of C or higher to count for graduation.

Automotive Service Excellence (ASE) Profile

Until the early 1970's, consumers had no way to distinguish between incompetent and competent mechanics. In response to this need, the independent, non-profit institute for Automotive Service Excellence (ASE) was established in 1972. ASE's mission is to improve the quality of vehicle repair and service through the testing and certification of repair and service professionals. At present time there are about 438,000 professionals with current certifications. They work in every segment of the automotive industry; car and truck dealerships, independent garages, fleets, service stations, franchises, and more.

Automotive Technology – A.A.S. Degree			
First Semester		**Automotive Courses**	**Credits**
	ATA 100	Automotive Safety and Light Vehicle Repair	4
	ATA 110	Automotive Basic Electrical Systems	3
	ATA 120	Automotive Shop Management	2
	ATA 124	Automotive State Inspection Prep	1
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**Automotive Courses**	**Credits**
	ATA 125	Automotive Steering and Suspension I	2
	ATA 126	Automotive Steering and Suspension II	2
	ATA 145	Automotive Brake Systems I	2
	ATA 146	Automotive Brake Systems II	2
	ATA 150	Automotive Engine Repair	3
		General Education Courses	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
	MAT 114	Technical Mathematics II	3
Summer Semester			
	ATA 190	Automotive Program Internship	3
Third Semester		**Automotive Courses**	**Credits**
	ATA 210	Advanced Automotive Electrical Systems	3
	ATA 215	Manual Transmissions and Driveline	3
	ATA 220	Engine Performance and Diagnosis	3
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
		General Education Courses	**Credits**
	Restricted Elective	Any Lab Science (100 level or higher)	4
Fourth Semester		**Automotive Courses**	**Credits**
	ATA 225	Automotive Heating and Air Conditioning	3
	ATA 230	Drivability and Emission Controls	3
	ATA 235	Automatic Transmissions and Transaxles	3
	WEL 265	Gas Metal Arc Welding (GMAW), Basic	1
		General Education Course	**Credits**
	ENG 215	Business and Technical Writing^	3
		TOTAL A.A.S. DEGREE CREDITS	**65**

^ELO Capstone

Automotive Certificate in Basic Systems			
First Semester		**Automotive Courses**	**Credits**
	ATA 100	Automotive Safety and Light Vehicle Repair	4
	ATA 110	Automotive Basic Electrical Systems	3
	ATA 120	Automotive Shop Management	2
	ATA 124	Automotive State Inspection Prep	1
		General Education Courses	
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**Automotive Courses**	**Credits**
	ATA 125	Automotive Steering and Suspension I	2
	ATA 126	Automotive Steering and Suspension II	2
	ATA 145	Automotive Brake Systems I	2
	ATA 146	Automotive Brake Systems II	2
	ATA 150	Automotive Engine Repair	3
		General Education Courses	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
	MAT 114	Technical Mathematics II	3
		TOTAL CERTIFICATE CREDITS	**33**

Building Construction Technology

Credentials:

Associate in Applied Science Degree (60-61 credit hours)
Certificate (32-33 credit hours)

Academic Requirements for Admission:

A.A.S. Degree: High School Level Algebra I required. Algebra II, Geometry, and either Physics or Chemistry with Lab desired.
Certificate: High School Level Algebra I required.

Program Overview:

Associate in Applied Science Degree: This program is designed for students who are planning for leadership positions within the construction industry. This program encompasses studies in cabinetmaking and millwork, residential, commercial and industrial construction. Building codes, construction estimating and scheduling, quality control and safety are integral components of this program. Students learn blueprint reading, computer aided drafting and design, construction layout, and carpentry skills. Students apply these skills by performing field layout projects, constructing a residential building, manufacturing and installing cabinetry and designing, placing and finishing concrete.

Certificate: This program is designed to prepare students for entry-level positions as a carpenter in the residential building field. This program focuses on residential construction. Students study blueprint reading, drafting, safety and residential construction practices and apply these studies by building a residential building.

Key Learning Objectives*:*

Graduates with the Associate in Applied Science Degree in the Building Construction program will function at an entry-level position in the construction industry, but with the skill set necessary for later promotion into a mid-management level position. Skills will include:

- Describing the features and characteristics of the building products used in the trade, from framing material, sheathing and roof covering to interior/exterior finish.
- Interpreting plans, estimating costs, and facilitating a project layout.
- Explaining the effects of insulation, moisture, and air barriers on a structure. Recognizing opportunities to prevent damage and construct an efficient durable product.
- Understanding and utilizing math calculations, formulas, and measurement techniques required in the carpentry trade.
- Producing high quality finished products using the proper hand tools required for the trade. This includes table saws, miter saws, circular saws, planer, jointer, pneumatic nailers, and all associated hand tools.

Building Construction Technology—A.A.S. Degree			
First Semester		**Building Construction Courses**	**Credits**
	BCT 151	Residential Construction I	7
	DTG 121	Architectural Drafting I	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**Building Construction Courses**	**Credits**
	BCT 152	Residential Construction II	7
	DTG 124	Architectural Drafting II	3
		General Education Courses	**Credits**
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
Third Semester		**Building Construction Courses**	**Credits**
	BCT 213	Stair Construction	1
	BCT 255	Commercial and Industrial Construction	4
	BCT 264	Estimating	3
	DTG 223	Architectural Drafting III	3
		General Education Courses	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
Fourth Semester		**Building Construction Courses**	**Credits**
	BCT 266	Construction Management and Estimating II	3
	BCT 272	Cabinetmaking and Millwork	5
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	Any Communications, Humanities, Math, Science or Social Science (100 level or higher)	3
		TOTAL A.A.S. DEGREE CREDITS	**60-61**

^ELO Capstone

Building Construction Technology—Certificate			
First Semester		**Building Construction Courses**	**Credits**
	BCT 151	Residential Construction I	7
	DTG 121	Architectural Drafting I	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**Building Construction Courses**	**Credits**
	BCT 152	Residential Construction II	7
	DTG 124	Architectural Drafting II	3
		General Education Courses	**Credits**
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
		TOTAL CERTIFICATE CREDITS	**32-33**

Business Management – Transfer Option

Credential:

Associate in Applied Science Degree (60 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Business Management program provides a sound foundation of principles designed to prepare students for the business world. Courses offer practical, marketable skills while developing an understanding of business theory. Graduates are qualified for entry-level management employment in banking, retailing, Federal and State government, sales, insurance, and marketing.

Key Learning Objectives*:*

Graduates with the Associate in Applied Science Degree in the Business Management program will get a thorough grounding in the theories and principles of accounting, finance, marketing, economics, statistics, and management. Skills will include:

- utilizing technology to analyze business problems and construct appropriate solutions;
- applying basic accounting and financial concepts to business problems;
- describing and explaining essential legal, regulatory, cultural and organizational framework of the business environment; and
- diagnosing marketing and management related issues and planning future actions.

Business Management—A.A.S. Degree Transfer Option			
First Semester		**Business Management Courses**	**Credits**
	BUA 101	Introduction to Business	3
	BUA 111	Accounting I	3
	BUA 165	Business Math	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	PSY 101 Introduction to Psychology *or* PSY 211 Human Relations	3
Second Semester		**Business Management Courses**	**Credits**
	BCA 115	Introduction to Computer Applications	3
	BUA 112	Accounting II	3
	BUA 131	Business Law I	3
		General Education Courses	**Credits**
	MAT 119	College Algebra	3
	PHI 101	Ethics	3
Third Semester		**Business Management Courses**	**Credits**
	BUA 211	Managerial Accounting	3
	BUA 234	Credit and Finance Management	3
	Restricted Elective	Any Business Management (100 level or higher)	3
		General Education Courses	**Credits**
	ECO 221	Introduction to Microeconomics	3
	MAT 161	Introduction to Statistics	3
Fourth Semester		**Business Management Courses**	**Credits**
	BUA 271	Marketing Principles	3
	BUA 291	Principles of Management and Organization	3
	Restricted Elective	Any Business Management (100 level or higher)	3
		General Education Courses	**Credits**
	ECO 222	Introduction to Macroeconomics	3
	ENG 215	Business and Technical Writing^	3
		TOTAL A.A.S. DEGREE CREDITS	**60**

Business Management Elective Options: BMT 113 Medical Terminology I, BUA 103 Business Plan Development, BUA 105 Business Communications, BUA 132 Business Law II, BUA 141 Principles of Small Business Management; BUA 213 Accounting with QuickBooks, BUA 260 Social Environment of Business, BUA 263 Sales and Customer Relations, BUA 265 Leadership, BUA 281 Cooperative Education for Business, or any HTM (Hospitality and Tourism Management) course. Other business courses may be considered on an individual basis.

^ELO Capstone.

Business Management – Career Option

Credential:

Associate in Applied Science Degree (60-62 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Business Management program with an Option in Careers is designed to offer students more flexibility in choosing classes geared toward entry-level management positions. This curriculum is also perfectly designed to enhance one's skills in preparation for advancement with their current employers.

Key Learning Objectives*:*

Graduates with the Associate in Applied Science Degree in the Business Management program will get a thorough grounding in the theories and principles of accounting, finance, marketing, economics, statistics, and management. Skills will include:

- utilizing technology to analyze business problems and construct appropriate solutions;
- applying basic accounting and financial concepts to business problems;
- describing and explaining essential legal, regulatory, cultural and organizational framework of the business environment; and
- diagnosing marketing and management related issues and planning future actions.

Business Management—A.A.S. Degree Career Option			
First Semester		**Business Management Courses**	**Credits**
	BUA 101	Introduction to Business	3
	BUA 111	Accounting I	3
	BUA 165	Business Math	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	PSY 101 Introduction to Psychology *or* PSY 211 Human Relations	3
Second Semester		**Business Management Courses**	**Credits**
	BCA 115	Introduction to Computer Applications	3
	BUA 112	Accounting II	3
	BUA 131	Business Law I	3
		General Education Courses	**Credits**
	PHI 101	Ethics	3
	Restricted Elective	Any Math (100 level or higher)	3
Third Semester		**Business Management Courses**	**Credits**
	BUA 221	Business Economics	3
	Restricted Elective	Any Business Management (100 level or higher)	3
	Restricted Elective	Any Business Management (100 level or higher)	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
Fourth Semester		**Business Management Courses**	**Credits**
	BUA 263	Sales and Customer Relations	3
	BUA 271	Marketing Principles	3
	BUA 291	Principles of Management and Organization	3
	Restricted Elective	Any Business Management (100 level or higher)	3
		General Education Course	**Credits**
	Restricted Elective	Any Communications, Humanities, Math, Science, or Social Science (100 level or higher)	3-4
		TOTAL A.A.S. DEGREE CREDITS	**60-62**

Restricted Elective: Refer to Business Management Elective courses on pg. 82. ^ELO Capstone.

Business Management - Small Business Development

Credential*:*

Certificate (30 credit hours)

Academic Requirement for Admission*:*

High School Level Algebra I

Program Overview*:*

The Certificate in Small Business Development is intended to help those individuals wanting to start a business or to help their current business become more successful.

Students enrolled in this program may also be Associate Degree students in Business Management. Most graduates of the Certificate program will be students adding courses to their existing programs.

Business Management - Small Business Development—Certificate			
First Semester		**Business Management Courses**	**Credits**
	BUA 101	Introduction to Business	3
	BUA 111	Accounting I	3
	BUA 141	Principles of Small Business Management	3
	BUA 263	Sales and Customer Relations	3
		General Education Course	**Credits**
	ENG101	College Composition	3
Second Semester		**Business Management Courses**	**Credits**
	BUA 103	Business Plan Development	3
	BUA 112	Accounting II	3
	BUA 131	Business Law I	3
	BUA 271	Marketing Principles	3
		General Education Course	**Credits**
	PHI 101	Ethics	3
		TOTAL CERTIFICATE CREDITS	**30**

Career Studies

Credential:

Associate in Applied Science Degree (60 credit hours)

Academic Requirement for Admission*:*

High School Level Algebra I

Program Overview:

Career Studies recognizes skills acquired through employment. Applicants must have earned a four-year high school diploma or a state high school equivalency certificate. All applicants are expected to have successfully completed at least four years of work experience. During the application process, the applicant must meet with the Program Coordinator.

The student begins the program by creating a portfolio that clearly outlines work-related competencies. The completed portfolio, which is reviewed by a team of appropriate evaluators, is used to determine if college credit will be awarded for prior learning experiences. The student must meet with an academic advisor to outline and plan the program of study. Graduates of this Program are employed in a variety of settings at the time of entry into the Program.

Career Studies – A.A.S. Degree			
		Career Studies Courses	**Credits**
		Prior Learning Assessment	1-21
	CAS 101 or CAS 103	Portfolio Development **or** Prior Learning Portfolio Development	1 3
		Selected Coursework (Minimum: 16 credits)	16-34
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	Any Communications (100 level or higher)	3
	Restricted Electives	Any Humanities or Social Science (100 level or higher)	6
	Restricted Electives	Mathematics or Science (100 level or higher)	6-7
	Restricted Elective	Any General Education	3
		TOTAL A.A.S. DEGREE CREDITS	**60**

Civil Engineering Technology

Suspended for the 2018-2019 academic year

Credential:

Associate in Science Degree (65-68 credit hours)

Academic Requirements for Admission:

High School Level Algebra I, Algebra II, Geometry and Physics required. Trigonometry desired.

Program Overview:

Civil Engineering Technology prepares students for employment as civil engineering technicians who will assist in the planning, design, and construction of buildings, highways and heavy construction.

Key Learning Objectives:

Graduates with the Associate in Science Degree in Civil Engineering Technology will function at an entry-level position as a civil engineering technician with the following skills:

- Analyze and solve solutions of force systems for beams, trusses, and frames under static loading.
- Evaluate material performance under applied loads for engineering applications for concrete, metals, plastics, and wood, and taking into account building code requirements for loads including dead, live, snow, wind, and earthquake.
- Construct probability density functions from test data and compute probabilities of failure.
- Use surveying procedures in construction and to calculate volume, stakeout, and grade.
- Layout site mapping, profile, and cross-sections.
- Use computer aided drafting and design software to draft plans and to analyze and design various civil engineering projects.

Civil Engineering Technology—A.S. Degree			
First Semester		**Civil Engineering Courses**	**Credits**
	CET 100	Introduction to Civil Engineering	1
	CET 110	Materials	3
	CET 111	Materials Laboratory	1
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	MAT 119 College Algebra *or* MAT 123 College Algebra and Trigonometry	3 or 4
	PHY 121	Physics I	3
	PHY 122	Physics I Laboratory	1
Second Semester		**Civil Engineering Courses**	**Credits**
	CET 101	Plane Surveying	3
	CET 121	Civil CADD	3
	CET 124	Construction Estimating	3
		General Education Courses	**Credits**
	Restricted Elective	MAT 120 College Trigonometry *or* MAT 217 Pre-Calculus	3
	PHY 123	Physics II	3
	PHY 124	Physics II Laboratory	1
Summer			**Credits**
	CET 201	Cooperative Education for Civil Engineering Technology (or CET 221)	3
Third Semester		**Civil Engineering Courses**	**Credits**
	CET 211	Statics and Strength of Materials	4
	CET 214	Soils Mechanics	4
		General Education Courses	**Credits**
	Restricted Elective	MAT 161 Introduction to Statistics *and* MAT 217 Pre-Calculus *or* MAT 225 Calculus I	6 or 4
	SPE 101	Oral Communication	3
Fourth Semester		**Civil Engineering Courses**	**Credits**
	CET 202	Construction Surveying	3
	CET 212	Structural Design	4
	CET 221	3D Civil CADD (or CET 201)	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
		TOTAL A.S. DEGREE CREDITS	**65-68**

^ELO Capstone

Community Paramedicine

Credential:

Advanced Certificate (17 credit hours)

Program Overview*:*

The Community Paramedic program is designed to educate students that are looking for career opportunities in any organization that provides community health care, emergency medical services, and public health. Graduates obtaining this advanced certificate will have the necessary skills to navigate and establish systems to better serve the citizens of their communities. They will help individuals and communities overcome barriers that prevent them from accessing and benefitting from health services. Community paramedics serve as advocates, facilitators, liaisons, community brokers and resource coordinators. They are also trained as direct service providers which will ensure basic and advanced levels of care appropriate to prevention, emergencies, evaluation, triage, disease management, and basic oral and mental health.

Program Learning Outcomes:

Upon completion of the Advanced Certificate in Community Paramedic, the graduate is prepared to:

- explain the scope of service for the role of the Community Paramedic (CP);
- differentiate between the role of the Community Paramedic, traditional community health care workers and the emergency medical personnel;
- demonstrate knowledge and skills required to perform clinical interventions;
- evaluate treatment and referral programs according to policies and protocols;
- evaluate the characteristics of health in the community;
- identify relevant health and welfare services; and
- characterize the role of the CP as a liaison between patients, health and welfare service.

Community Paramedic – Advanced Certificate			
		Required Courses	**Credits**
	EMS 270	Community Paramedic Advocacy and Outreach	5
	EMS 280	Community Assessment	2
	EMS 271	Care and Prevention Development Strategies	5
	EMS 281	Community Paramedic Clinical	5
		TOTAL ADVANCED CERTIFICATE CREDITS	**17**

Computer Science

Credential:

Associate in Applied Science Degree (62 credit hours)

Academic Requirements for Admission:

High School Level Algebra I required. Algebra II desired.

Program Overview*:*

The Computer Technology field is ever growing and changing, requiring motivated problem solvers in today's technology driven world. The Computer Science Department offers four Associate in Applied Science Degree programs, one Certificate, and one Advanced Certificate that are designed to prepare students for entry-level positions within Information Technology (IT).

Students will receive a solid foundation in a variety of different areas including systems hardware and software, network design and management, customer service, and information security.

Graduates are prepared to assume a variety of positions such as: desktop support, help desk technician, network installer, network technician, network administrator, information security, network security, and technology trainer.

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree in the Computer Science Technology program should be able to:

- install, configure, troubleshoot, maintain, and upgrade computer systems hardware and software;
- effectively design and manage networks and efficiently operate them;
- interact appropriately with customers, co-workers, and the public in a service oriented industry; and
- apply appropriate security measures and practices.

Computer Science – Coding Option:

Programming or coding is writing the instruction sets that allow the end user to interact with the computer or electronic device. Whether it is gaming, interactive applications or a webpage, it all starts with the code. Students start with basic interactive code creating webpages and then learn how this relates to object-oriented coding. Students will also be exposed to cloud computing and how it relates to coding and the future of electronic media.

Computer Science – Coding Option – A.A.S. Degree			
First Semester		**Computer Science Courses**	**Credits**
	CST 101 or FYE 100	Introduction to College Learning College Success	1
	CST 103	Introduction to Computer Systems	3
	CST 123	PC Hardware and Operating Systems	3
	CST 143	Web Applications and Development	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 119	College Algebra	3
Second Semester		**Computer Science Courses**	**Credits**
	CST 124	An Introduction to Linux	3
	CST 162	Network+ Certification	4
	CST 154	Object-Oriented Programming I	3
		General Education Courses	**Credits**
	MAT 120 or MAT 161	College Trigonometry or Introduction to Statistics	3
	SPE 101	Oral Communication	3
Third Semester		**Computer Science Courses**	**Credits**
	CST 203	Systems Analysis and Design	3
	CST 251	Cloud Computing I	3
	CST 253	Object Oriented Programming II	3
		General Education Courses	**Credits**
	Restricted Elective+	Any Humanities or Social Science (100 level or higher)	3
	PSY 211	Human Relations	3
Fourth Semester		**Computer Science Courses**	**Credits**
	CST 163	Computer Applications	4
	CST 254	Cloud Computing II	3
	CST 256	Software Development and Marketing	3
	CST 248	Capstone	1
		General Education Course	**Credits**
	PHY108	Survey of Applied Physics	4
		TOTAL A.A.S. DEGREE CREDITS	**62**

In addition to the Associate in Applied Science Degree in Coding, EMCC also offers an Advanced Certificate in Coding. This program is designed to educate students that already have a degree and are looking for career opportunities in any organization that needs to provide customized software support or needs to be able to manipulate data. Through this certificate a student will better be able to use the structures and programs necessary for software manipulation, database management, data mining, or website development.

Key Learning Objectives:

Upon completion of the Advanced Certificate in Computer Systems - Coding, the graduate is prepared to:

- apply core software development processes at a conceptual level for a given problem;
- compare and contrast development methodologies;
- explain the relevance of ethics in the context of software development;
- examine software project management principles and techniques;
- create a system design (the Solution model) that supports the functional requirements (FRs); and
- analyze system requirements to determine Structural Modeling.

Computer Science Coding – Advanced Certificate			
		Required Courses	**Credits**
	CST 154	Object Oriented Programming I	3
	CST 251	Object Oriented Programming II	3
	CST 253	Cloud Computing I	3
	CST 254	Cloud Computing II	3
	CST 256	Software Development and Marketing	3
	CST 248	Capstone	1
		TOTAL ADVANCED CERTIFICATE CREDITS	**16**

Computer Science – Database Management Option:

The Database Management option provides a solid foundation of databases and their structure. Students will be exposed to the servers that run a database, how to create software to interact with the data, and what the correlation between different data points are and how to collect that information.

Computer Science – Database Management – A.A.S. Degree			
First Semester		**Computer Science Courses**	**Credits**
	CST 101 or FYE 100	Introduction to College Learning College Success	1
	CST 103	Introduction to Computer Systems	3
	CST 123	PC Hardware and Operating Systems	3
	CST 143	Web Applications and Development	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 119	College Algebra	3
Second Semester		**Computer Science Courses**	**Credits**
	CST 124	An Introduction to Linux	3
	CST 162	Network+ Certification	4
	CST 154	Object-Oriented Programming I	3
		General Education Courses	**Credits**
	MAT 120 or MAT 161	College Trigonometry or Introduction to Statistics	3
	SPE 101	Oral Communication	3
Third Semester		**Computer Science Courses**	**Credits**
	CST 203	Network Administration	3
	CST 232	Server Operating Systems	3
	CST 235	Database Systems Design and Implementation	3
		General Education Courses	**Credits**
	Restricted Elective+	Any Humanities or Social Science (100 level or higher)	3
	PSY 211	Human Relations	3
Fourth Semester		**Computer Science Courses**	**Credits**
	CST 163	Computer Applications	4
	CST 236	Object Oriented Analysis and Design	3
	CST 240	Data Mining	3
	CST 248	Capstone	1
		General Education Course	**Credits**
	PHY108	Survey of Applied Physics	4
		TOTAL A.A.S. DEGREE CREDITS	**62**

Computer Science – Help Desk Option:

The Help Desk option provides the basic foundation, practical education and work experience for entry-level as a member of a client services team. A basic understanding of computer systems, software, customer service and ancillary services will prepare the student for providing a high level of service and exceptional support as the first line of help in the IT department.

Computer Science – Help Desk Option – A.A.S. Degree			
First Semester		**Computer Science Courses**	**Credits**
	CST 101 or FYE 100	Introduction to College Learning College Success	1
	CST 103	Introduction to Computer Systems	3
	CST 123	PC Hardware and Operating Systems	3
	CST 143	Web Applications and Development	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 119	College Algebra	3
Second Semester		**Computer Science Courses**	**Credits**
	CST 162	Network+ Certification	4
	CST 163	Computer Applications	4
	CST 170	Customer Service Concepts	3
		General Education Courses	**Credits**
	MAT 120 or MAT 161	College Trigonometry or Introduction to Statistics	3
	SPE 101	Oral Communication	3
Third Semester		**Computer Science Courses**	**Credits**
	BMT 121	Medical Law and Ethics	3
	CST 203	Network Administration	3
	CST 271	Help Desk Operations	3
		General Education Courses	**Credits**
	Restricted Elective+	Any Humanities or Social Science (100 level or higher)	3
	PSY 211	Human Relations	3
Fourth Semester		**Computer Science Courses**	**Credits**
	CST 221	Network Security	3
	CST 248	Capstone	1
	CST 274	Help Desk Internship	6
		General Education Course	**Credits**
	PHY108	Survey of Applied Physics	4
		TOTAL A.A.S. DEGREE CREDITS	**62**

Computer Science – Networking Option:
Communication between devices is becoming more prevalent and being able to understand and work with the wide variety of networked systems is in high demand. Students will receive the knowledge needed to navigate in this ever-changing field of computer, network, and wireless systems.

Computer Science – Networking Option – A.A.S. Degree			
First Semester		**Computer Science Courses**	**Credits**
	CST 101 or FYE 100	Introduction to College Learning College Success	1
	CST 103	Introduction to Computer Systems	3
	CST 123	PC Hardware and Operating Systems	3
	CST 143	Web Applications and Development	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 119	College Algebra	3
Second Semester		**Computer Science Courses**	**Credits**
	CST 162	Network+ Certification	4
	CST 163	Computer Applications	4
	CST 170	Customer Service Concepts	3
		General Education Courses	**Credits**
	MAT 120 or MAT 161	College Trigonometry or Introduction to Statistics	3
	SPE 101	Oral Communication	3
Third Semester		**Computer Science Courses**	**Credits**
	CST 203	Network Administration	3
	CST 232	Server Operating Systems	3
	CST 251	Cloud Computing I	3
		General Education Courses	**Credits**
	Restricted Elective+	Any Humanities or Social Science (100 level or higher)	3
	PSY 211	Human Relations	3
Fourth Semester		**Computer Science Courses**	**Credits**
	CST 221	Network Security	3
	CST 226	Wireless Networking	3
	CST 246	Virtualized Computer Systems	3
	CST 248	Capstone	1
		General Education Course	**Credits**
	PHY108	Survey of Applied Physics	4
		TOTAL A.A.S. DEGREE CREDITS	**62**

Computer Science – Computer Repair Technology

Credential:

Certificate (33 credit hours)

Academic Requirements for Admission:

High School Level Algebra I required. Algebra II desired.

Program Overview:

The Certificate program in Computer Repair Technology (CRT) prepares the successful student for an entry-level position in the field of computer repair. Students are provided with a solid foundation in hardware and software, basic networking, and coding. Graduates are prepared to assume a variety of positions such as desktop support, help desk technician, and computer maintenance.

The Computer Repair Certificate may be used as a pathway for students who may later want to enter an Associate in Applied Science Degree program in Computer Science.

Computer Repair Technology—Certificate			
First Semester		**Computer Science Courses**	**Credits**
	CST 101	Introduction to College Learning *or* FYE 100 College Success Course	1
	CST 103	Introduction to Computer Systems	3
	CST 123	PC Hardware and Operating Systems	3
	CST 143	Web Applications and Development	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	MAT 113 Technical Mathematics I *or* MAT 119 College Algebra	3
Second Semester		**Computer Science Courses**	**Credits**
	CST 162	Network+ Certification	4
	CST 163	Computer Applications	4
	CST 170	Customer Service Concepts	3
		General Education Courses	**Credits**
	Restricted Elective	MAT 114 Technical Mathematics II *or* MAT 120 College Trigonometry	3
	Restricted Elective	ENG 215 Business and Technical Writing *or* PSY 211 Human Relations *or* SPE 101 Oral Communications	3
		TOTAL CERTIFICATE CREDITS	**33**

Note: MAT 119 and MAT 120 are recommended for those students who anticipate pursuing an Associate in Applied Science Degree in Computer Science. All 33 credits could then transfer directly into the degree program.

Criminal Justice

Credential:

Associate in Applied Science Degree (60-61 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview*:*

The Criminal Justice (CRJ) program is designed to provide a solid foundational understanding of the American justice system. Students are required to complete a range of major courses that blend academic learning with a highly emphasized experiential focus. Under the instruction of a diverse faculty of practicing professionals, hands-on learning exercises are utilized to translate conceptual awareness into real world application of knowledge. Individual and team-based class-room learning is also augmented by internship opportunities in area agencies and offices. The program is designed to meet the needs of both traditional and non-traditional students who seek to gain the education necessary to penetrate or advance within any number of justice professions.

Graduates of the CRJ program will be well-positioned to:

- complete a Bachelor's degree in Criminal Justice at a four-year college or university;
- apply to the Maine Criminal Justice Academy (MCJA) Law Enforcement Pre-Service Training Program OR Basic Law Enforcement Training Program ;
- seek entry-level employment in private security, law enforcement, corrections, and the courts.

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree in Criminal Justice will be able to:

- explain the core responsibilities of the police, courts, and corrections as each relates to the administration of justice within the American criminal justice system;

- describe the sequential movement of an individual accused of a crime through the various stages of investigation, adjudication, sentencing, and corrections;
- compare and contrast the adult and juvenile justice systems in modern American corrections;
- apply conceptual knowledge to the application of laws of evidence, search and seizure, and arrest;
- utilize current information and management tools to gather and evaluate data used by justice practitioners; and
- analyze and employ ethically driven critical analysis skills in decision-making.

Examples of career opportunities include, but are not limited to:

Municipal Police Officer	County Sheriff's Deputy
State Trooper	Game Warden
Corrections Officer	Victim-Witness Advocate
Marine Patrol Officer	Probation Officer
Loss Prevention Worker	Fire Marshal
Dispatcher	Fraud Investigator

Criminal Justice—A.A.S. Degree			
First Semester		**Criminal Justice Course**	**Credits**
	CRJ 101	Introduction to Criminal Justice	3
		General Education Courses	**Credits**
	BCA 115	Introduction to Computer Applications	3
	ENG 101	College Composition	3
	MAT 119	College Algebra	3
	SOC 101	Introduction to Sociology	3
Second Semester		**Criminal Justice Courses**	**Credits**
	CRJ 113	Criminology	3
	CRJ 121	Criminal Law	3
	CRJ 131	Police Operations	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	PSY 101	Introduction to Psychology	3
Third Semester		**Criminal Justice Courses**	**Credits**
	CRJ 205	Criminal Investigations	3
	CRJ 232	Report Writing and Testifying	3
	CRJ 242	Criminal Procedure	3
		General Education Courses	**Credits**
	PSY 235	Abnormal Psychology	3
	SPE 101	Oral Communications	3
Fourth Semester		**Criminal Justice Courses**	**Credits**
	CRJ 201	Ethics for the CJ Practitioner	3
	CRJ 221	American Corrections	3
	CRJ 226	Criminalistics	3
	Restricted Elective	Any Criminal Justice (200 level or higher)	3
		General Education Course	**Credits**
	Restricted Elective	CHE 103 Chemistry for Emergency Responders *or* BIO 121 A&P I *and* BIO 124 A&P I Lab	3-4
		TOTAL A.A.S. DEGREE CREDITS	**60-61**

^ELO Capstone

Corrections Certificate:

This one-year certificate provides students with the opportunity to gain college-level credit for completion of the Maine Criminal Justice Academy's Basic Corrections training. This external training program is augmented by a survey of the history and philosophy in American corrections. Students gain knowledge and skills necessary to penetrate entry-level corrections positions in local and state detention centers, (e.g. county jails and state prison facilities). An emphasis is placed on the historical backdrop of punishment in American culture interwoven with practical training in inmate care and custody. In addition, proficiencies are developed in topics relevant to the profession; particularly oral and written communication, stress management, and physical fitness.

Criminal Justice—Corrections - Certificate			
First Semester		**Criminal Justice Course**	**Credits**
	CRJ 101	Introduction to Criminal Justice	3
		General Education Courses	**Credits**
	BCA 115	Introduction to Computer Applications	3
	ENG 101	College Composition	3
	Restricted Elective	MAT 113 Technical Mathematics I or MAT 119 College Algebra	3
	PSY 101	Psychology for First Responders	3
Second Semester		**Criminal Justice Courses**	**Credits**
	CRJ 105	Physical Fitness Laboratory	1
	CRJ 221	American Corrections	3
	CRJ Elective	MCJA Basic Corrections Training	8
		General Education Course	**Credits**
	ENG 215	Business and Technical Writing	3
		TOTAL CERTIFICATE CREDITS	**30**

Culinary Arts

Credential:

Associate in Applied Science Degree (62-63 credit hours)

Academic Requirements for Admission:

High School Level Algebra I required. Algebra II and one lab science desired.

Program Overview:

The Culinary Arts program provides students with a complete and versatile background in culinary arts. Students study professional cooking methodology; Classical French, International and American regional cuisines; pastry arts; tableside cookery; advanced garde manger production; and other culinary topics. Students learn to apply this knowledge through hands-on experience in the kitchen and dining room and operate the school's in-house restaurant as part of their second year of studies. Graduates work as cooks, sous chefs, chefs, kitchen managers and the like. They may also choose to transfer to four-year College programs to further their education.

Graduates will have the opportunity to become certified in the areas of ServSafe Sanitation through the Educational Foundation of the National Restaurant Association and Food and Beverage Management through the Educational Institute of the American Hotel and Lodging Association Educational Institute.

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree in Culinary Arts will be able to perform at mid-level and leadership positions in the areas of basic professional cooking and baking, as well as front of the house and supervisory responsibilities. Graduates will:

- create professional quality food;
- make use of management techniques, industry math, and sanitation;
- construct menus and recipes;
- demonstrate employability skills;
- analyze food with regard to nutrition and dietary concerns; and
- demonstrate professional food and beverage service skills.

Culinary Arts—A.A.S. Degree			
First Semester		**Culinary Arts Courses**	**Credits**
	CUL 112	Culinary Skills Development	3
	CUL 124	Culinary Arts I	6
	CUL 131	Culinary Sanitation and Theory	3
		General Education Course	**Credits**
	ENG 101	College Composition	3
Second Semester		**Culinary Arts Courses**	**Credits**
	CUL 125	Culinary Arts II	6
	CUL 141	Food Service Management	3
		General Education Courses	**Credits**
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
	SPE 101	Oral Communications	3
Summer			
	CUL 215	Culinary Externship	3
Third Semester		**Culinary Arts Courses**	**Credits**
	CUL 218	Classical European Pastry Arts	3
	CUL 262	Classical French Cuisine	5
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
	By permission	*CUL230 Regional Italian Cuisine (by permission only) – not required*	*3*
Fourth Semester		**Culinary Arts Courses**	**Credits**
	CUL 214	Advanced Culinary Skills	3
	CUL 264	International Cuisine	5
		General Education Courses	**Credits**
	NUT 221	Nutrition	4
	Restricted Elective	Any Humanities or Social Science (100 level or higher) HIS 106 – Food in History Recommended	3
		TOTAL A.A.S. DEGREE CREDITS	**62-63**

^ ELO Capstone

Culinary Arts - Food Service Specialist Certificate

Credential:

Certificate (30-31 hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Food Service Specialist Certificate program is designed to meet the educational needs of students who wish to pursue entry to mid-level kitchen positions in food service operations such as restaurants or institutions. Students may seamlessly continue in an Associate Degree program in either Culinary Arts or Restaurant and Food Service Management after having earned their Food Service Specialist Certificate.

Key Learning Objectives:

Graduates with a Food Service Specialist Certificate will be able to perform at entry to mid-level positions in many areas of a commercial kitchen. A Classical French foundation will guide graduates through their practical hands-on kitchen training, which includes American Regional Cuisine.

Specific program objectives include:

- creating professional quality food;
- making use of management techniques, industry math, and sanitation;
- constructing menus and recipes;
- demonstrating employability skills;
- analyzing food with regard to nutrition and dietary concerns; and
- demonstrating professional food and beverage service skills.

Graduates will have the opportunity to become certified in the areas of ServSafe Sanitation through the Educational Foundation of the National Restaurant Association and Food and Beverage Management through the Educational Institute of the American Hotel and Lodging Association Educational Institute.

Culinary Arts – Food Service Specialist—Certificate			
First Semester		**Culinary Arts Courses**	**Credits**
	CUL 112	Culinary Skills Development	3
	CUL 124	Culinary Arts I	6
	CUL 131	Culinary Sanitation and Theory	3
		General Education Course	**Credits**
	ENG 101	College Composition	3
Second Semester		**Culinary Arts Courses**	**Credits**
	CUL 125	Culinary Arts II	6
	CUL 141	Food Service Management	3
		General Education Courses	**Credits**
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
	SPE 101	Oral Communications	3
		TOTAL CERTIFICATE CREDITS	**30-31**

Diesel, Truck and Heavy Equipment Technology

Credential:

Associate in Applied Science Degree (64 credit hours)

Academic Requirements for Admission:

High School Level Algebra I required. Algebra II, Geometry, and either Physics or Chemistry with Lab desired.

Program Overview:

The Diesel, Truck and Heavy Equipment Technology program provides theoretical foundations, practical education, and work experience in the servicing, troubleshooting and repairing of trucks, diesel engines and heavy equipment. The curriculum is designed to ensure that course content is pertinent to the needs of industry. Recent graduates are employed as heavy equipment service technicians, sales personnel, service managers, maintenance supervisors, service writers, warranty claims adjusters, and parts persons.

Students are tested with standard written tests as well as hands-on testing that coincide with the assigned textbook and industry standards in each area. Students must pass within the C range or higher to pass each module.

Key Learning Objectives*:*

Graduates with the Associate in Applied Science Degree in Diesel, Truck and Heavy Equipment will function at an entry-level position for servicing, diagnosing, repairing and creating work orders. Graduates will be prepared to diagnose, repair and document:

- components of electrical and electronics systems;
- components of suspension, brakes and drivetrains;
- components of diesel and heavy duty engines;
- hydraulic systems; and
- components of air conditioning systems;

Diesel, Truck and Heavy Equipment—A.A.S. Degree			
First Semester		**Diesel, Truck and Heavy Equipment Courses**	**Credits**
	ATH 101	Shop Orientation and Safety I: Heavy Equipment/Truck I	1
	ATH 113	Heavy Equipment/Truck Braking Systems	3
	ATH 163	Heavy Equipment/Truck Steering and Suspension Systems	3
	ATT 133	Basic Electrical Systems	3
	ATT 135	Advanced Electrical Systems	2
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**Diesel, Truck and Heavy Equipment Courses**	**Credits**
	ATH 103	Minor Repairs: Heavy Equipment/Truck	2
	ATH 121	Heavy Equipment/Truck Drive Trains	4
	ATH 175	Motor Vehicle Inspection	2
	ATT 251	Automotive Basic Machine Shop Principles	2
		General Education Courses	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
	SPE 101	Oral Communications	3
Third Semester		**Diesel, Truck and Heavy Equipment Courses**	**Credits**
	ATH 131	Diesel Engines (Heavy, Gas)	4
	ATH 133	Diesel Engine Diagnosis and Tune-up (Heavy, Gas)	3
	ATH 141	Diesel Fuel Systems	3
	WEL 265	Gas Metal Arc Welding (GMAW), Basic	1
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	CHE 100 PHY 108	Chemistry for Everyday Living ***or*** Survey of Applied Physics	4
Fourth Semester		**Diesel, Truck and Heavy Equipment Courses**	**Credits**
	ATH 151	Hydraulic Systems	3
	ATH 211	Shop Management: Heavy Equipment/ Truck	2
	ATH 273	Exhaust Aftertreatment System/Alternate Fuels	1
	ATT 141	Heating and Air Conditioning	3
		General Education Course	**Credits**
		Any Humanities or Social Science (100 level or higher)	3
		TOTAL A.A.S. DEGREE CREDITS	**64**

^ELO Capstone

Heavy Truck and Equipment Systems

Credential:

Certificate (31 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Heavy Truck and Equipment Systems Technology program provides theoretical foundations, practical education, and work experience in the servicing, troubleshooting and repairing of trucks, diesel engines and heavy equipment. The curriculum is designed to insure that course content is pertinent to the needs of industry. Recent graduates are employed as heavy equipment service technicians, sales personnel, service managers, maintenance supervisors, service writers, warranty claims adjusters, and parts persons.

Heavy Truck and Equipment Systems—Certificate			
First Semester		**Heavy Equipment Courses**	**Credits**
	ATH 101	Shop Orientation and Safety I: Heavy Equipment/Truck I	1
	ATH 113	Heavy Equipment/Truck Braking Systems	3
	ATT 133	Basic Electrical Systems	3
	ATT 135	Advanced Electrical Systems	2
	ATH 163	Heavy Equipment/Truck Steering and Suspension Systems	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**Heavy Equipment Courses**	**Credits**
	ATH 103	Minor Repairs: Heavy Equipment/Truck	2
	ATH 121	Heavy Equipment/Truck Drive Trains	4
	ATH 175	Motor Vehicle Inspection	2
	ATT 251	Automotive Basic Machine Shop Principles	2
		General Education Course	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
		TOTAL CERTIFICATE CREDITS	**31**

Digital Graphic Design

Credentials:

Associate in Applied Science Degree (61-62 credit hours)
Certificate (30 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Digital Graphic Design (DGD) program provides theoretical foundations, practical education, and work experience in commercial art. Using current digital technologies and software, students study type, design principles, page layout, photography, image editing, digital illustration, web design and printing/publishing. Graduates of the DGD Program work in marketing, publicity, photography, printing and web design companies.

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree in Digital Graphic Design will:

- apply specific cognitive skills acquired through creative, artistic and logical means to graphics projects;
- formulate a project from beginning to end in a creative, original and intuitive way;
- solve visual design problems, make judgments and decisions, and think logically and critically;
- develop skills in time management and organization while working on multiple projects simultaneously with strict deadlines; and
- illustrate technical software proficiency in graphics, business skills, production processes, and the application of these to careers in Digital Graphics.

Digital Graphic Design—A.A.S. Degree			
First Semester		**Digital Graphic Design Courses**	**Credits**
	ART 112	2-D Design	3
	DGD 113	Introduction to Photoshop	3
	DGD 120	Digital Illustration	3
		General Education Courses	
	ENG 101	College Composition	3
	Restricted Elective	Any Math (100 level or higher)	3
Second Semester		**Digital Graphic Design Courses**	**Credits**
	ART 101	Introduction to Digital Photography	3
	DGD 131	Introduction to Page Layout & Design	3
	DGD 133	Marketing Communications	3
		General Education Courses	**Credits**
	HUM 103	Intro to Art and Design in the 20th Century	3
	Restricted Elective	Any Communications, Humanities, Mathematics Science or Social Science (100 level or higher)	3
Third Semester		**Digital Graphic Design Courses**	**Credits**
	ART 232	Commercial Photography	3
	DGD 201	Graphic Web Design	3
	DGD 221	Introduction to Typography	3
	DGD 224	Introduction to Time-Based Media	3
		General Education Course	**Credits**
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
Fourth Semester		**Digital Graphic Design Courses**	**Credits**
	CST 143	Web Application and Development	3
	DGD 230	Professional Business Practices	4
	DGD 231	Printing and Publishing	3
	DGD 232	Advanced Digital Graphics	3
		General Education Course	**Credits**
	ENG 215	Business and Technical Writing^	3
		TOTAL A.A.S. DEGREE CREDITS	**61-62**

^ELO Capstone

Digital Graphic Design—Certificate			
First Semester		**Digital Graphic Design Courses**	**Credits**
	ART 112	2-D Design	3
	DGD 113	Introduction to Photoshop	3
	DGD 120	Digital Illustration	3
		General Education Courses	
	ENG 101	College Composition	3
	Restricted Elective	Any Math (100 level or higher)	3
Second Semester		**Digital Graphic Design Courses**	**Credits**
	ART 101	Introduction to Digital Photography	3
	DGD 131	Introduction to Page Layout & Design	3
	DGD 133	Marketing Communications	3
		General Education Courses	**Credits**
	HUM 103	Intro to Art and Design in the 20th Century	3
	Restricted Elective	Any Communications, Humanities, Mathematics Science or Social Science (100 level or higher)	3
		TOTAL CERTIFICATE CREDITS	**30**

Early Childhood Education

Credentials:

Associate in Applied Science Degree (62-63 credit hours)
Certificate (34 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

Early Childhood Education prepares individuals for rewarding careers as skilled early childhood professionals. The Associate in Applied Science Degree offers the theoretical foundation and practical learning experiences for success in a wide variety of occupations working with young children from birth through age eight, including those children with special developmental and learning needs. Students may choose to use this degree as a pathway to earn a Bachelor's Degree in a PreK-3 teaching certification program.

The Early Childhood Certificate program prepares individuals for entry-level positions at institutions and agencies serving young children and for in-service personnel who want to upgrade their skills.

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree in Early Childhood Education will:

- apply current principles of child development and positive guidance to plan and implement developmentally appropriate experiences and environments for young children;
- develop strategies to form respectful and supportive relationships that integrate principles of diversity when interacting and planning experiences for young children and their families;
- use observation, documentation and developmentally appropriate assessment tools to track progress, plan curriculum

and develop strategies for communicating with families and other professionals;

- apply strategies, resources and a variety of instructional methods to plan, implement and evaluate meaningful and challenging curriculum that promotes positive learning outcomes for all young children; and
- reflect on practices and engage in professional behaviors for continuous professional growth.

Students who hold a current Child Development Associate (CDA) credential or have submitted an acceptable portfolio to the College may receive up to nine (9) college credits in the Early Childhood Education program. A copy of the current CDA certificate must be presented for evaluation.

Early Childhood Education—A.A.S. Degree			
First Semester		**Early Childhood Education Courses**	**Credits**
	ECE 110	Child and Adolescent Development	3
	ECE 116	Early Literacy Development	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Elective #	General Education Course	3
	Elective #	General Education Course	3
Second Semester		**Early Childhood Education Courses**	**Credits**
	ECE 117	Observing and Recording in the Field	3
	ECE 127	Cognitive and Affective Development	3
	ECE 131	Infant and Toddler Curriculum	3
		General Education Courses	**Credits**
	Elective #	General Education Course	3
	Elective #	General Education Course	3
Third Semester		**Early Childhood Education Courses**	**Credits**
	ECE 216	Survey of Exceptionalities	3
	ECE 220	Numeracy, Environments and Integrated Curriculum for Young Children	3
	ECE 232	Field Placement II	4
		General Education Courses	**Credits**
	Elective #	General Education Course	3
	Elective #	General Education Course^	4
Fourth Semester		**Early Education Courses**	**Credits**
	ECE 221	STEM Curriculum for Young Children	3
	ECE 233	Field Placement III	6
	Education Elective	Any EDB of ECE course not taken as a requirement	3
		General Education Course	**Credits**
	Elective #	General Education Course	3-4
		TOTAL A.A.S. DEGREE CREDITS	**62-63**

 # General Education Selections which are not dictated must be in this distribution and must be 100 level or higher

3 Credits – Communications
9 Credits – Humanities or Social Sciences
10 Credits– Math or Science (Minimum of one MAT course and one lab science)

^Students must enroll in one of two Essential Learning Outcome capstone courses - ENG215 or PSY214.

All students who wish to make use of transfer agreements may be more restricted.

Early Childhood Education - Certificate			
First Semester		**Early Childhood Education Courses**	**Credits**
	ECE 110	Child and Adolescent Development	3
	ECE 116	Early Literacy Development	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Elective #	General Education Course	3
Second Semester		**Early Childhood Education Courses**	**Credits**
	ECE 117	Observing and Recording in the Field	3
	ECE 127	Cognitive and Affective Development	3
	ECE 131	Infant and Toddler Curriculum	3
Third Semester		**Early Childhood Education Courses**	**Credits**
	ECE 216	Survey of Exceptionalities	3
	ECE 220	Numeracy, Environments and Integrated Curriculum for Young Children	3
	ECE 232	Field Placement II	4
		General Education Course	**Credits**
	Elective #	General Education Course	3
		TOTAL CERTIFICATE CREDITS	**34**

 # General Education Selections which are not dictated must be in this distribution and must be 100 level or higher

3 Credits – Humanities or Social Sciences

3 Credits – Math

Education -
Career and Technical Education Option

Credential:

Associate in Applied Science Degree (61 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Education program with an option in Career and Technical Education (CTE) is designed for current and future educators who teach in Career and Technical Education Centers and Community Colleges. The program offers practical learning experiences to help the instructor adapt to teaching their technical trade to high school and college students. Graduates of this concentration will learn specific teaching methods and strategies to enhance student success. Classroom and lab management, safety, assessment and behavior management will be included in the curriculum. Graduates may use this degree as a pathway to continue their education in CTE Teaching at the bachelor's and master's level.

Key Learning Objectives:

Graduates of the CTE Option will:

- explain the mission, history and emerging trends for Career and Technical Education;
- use a variety of instructional strategies to plan learning experiences and activities that meet the diverse needs of all students and to encourage critical thinking and problem solving;
- determine effective classroom management and safety practices for CTE environments;
- integrate literacy, mathematics and other relevant subject matter into the CTE discipline/content area(s);
- use appropriate assessment strategies to inform curricula decisions, adjust instruction and evaluate student learning outcomes; and

- reflect on teaching practices and continually seek opportunities to grow professionally.

Education – A.A.S. Degree Career and Technical Education Option			
Summer Semester		**Education Course**	**Credits**
	EDB 101	Introduction to Career and Technical Education (CTE)	3
Fall Semester		**Education Courses**	**Credits**
	ECE 216	Survey of Exceptionalities	3
	EDB 202	Introduction to Education-Schools, Students and Society	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Elective	Any Math	3
Spring Semester		**Education Courses**	**Credits**
	EDB 212	Assessment and Evaluation in CTE Programs	3
	EDB 232	Field Experience II	4
		General Education Courses	**Credits**
	Elective	Any Communications^	3
	Elective	Any Science	4
Summer Semester		**Education Course**	
	EDB 112	Classroom/Lab Management and Safety for CTE	3
Fall Semester		**Education Courses**	**Credits**
	EDB 115	Development and Guidance of Behavior	3
	EDB 217	Integrating Literacy into Career and Technical Education Environments	3
		General Education Courses	**Credits**
	Elective	Any Math or Science	3
	Electives	Any Humanities or Social Sciences^	9
Spring Semester		**Education Courses**	
	EDB 204	The Teaching Process	3
	EDB 213	Working with Students with Autism	3
	EDB 233	Field Experience III	5
		TOTAL A.A.S. DEGREE CREDITS	**61**

^Students must enroll in one of two Essential Learning Outcome capstone courses - ENG215 or PSY214.

Education for Career and Technical Educators

Credentials:

Advanced Certificate (18 credit hours)

Program Overview:

The Advanced Certificate in Education for Career and Technical Educators is designed to prepare practicing teachers at CTE centers to improve and enhance their teaching practice and to integrate educational concepts, strategies and methodologies into lessons and assessments for high school students. Graduates obtaining this certificate will also satisfy the State of Maine requirement for CTE teachers to earn a conditional teaching certification to teach at a Career and Technical Education Center.

Education for Career and Technical Educators – Advanced Certificate			
		Career and Technical Education Courses	**Credits**
	EDB 101	Introduction to Career and Technical Education (CTE)	3
	EDB 112	Classroom/Lab Management and Safety for CTE	3
	EDB 204	The Teaching Process	3
	ECE 216	Survey of Exceptionalities	3
	EDB 212	Assessment and Evaluation in CTE Programs	3
	EDB 217	Integrating Literacy into Career and Technical Education Environments	3
		TOTAL ADVANCED CERTIFICATE CREDITS	**18**

Education -
Elementary Education (K-8) Option

Credentials:

Associate in Applied Science Degree (61-62 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Education program with an option in Elementary Education prepares students for rewarding careers in K-8 schools and social service agencies to perform important and supporting roles. This program offers the theoretical foundation and practical learning experiences for success in a wide variety of occupations working with children and adolescents in classrooms and other settings.

Graduates of this program will learn specific teaching methods, behavior management strategies and will apply knowledge of child and adolescent development in their work. Graduates of the program may use this degree as a pathway to continue their education to become a certified K-8 teacher.

This program is appropriate for individuals who wish to gain recertification credits for a current teaching certificate or who wish to upgrade skills in working with all students within their classrooms.

Key Learning Objectives:

Graduates of the Elementary Education (K-8) Option will:

- apply current principles of child development and positive guidance to plan and implement appropriate experiences and environments for students;
- use formative and summative assessment and a variety of instructional methods to plan, implement and evaluate meaningful and challenging curriculum that promotes positive learning outcomes for all students based on National and State standards;

- use a variety of instructional strategies to meet the diverse learning needs of students and to encourage critical thinking and problem solving; and
- reflect on practices and engage in professional behaviors for continuous professional growth.

Education—A.A.S. Degree Elementary Education (K-8) Option			
First Semester		**Education Courses**	**Credits**
	ECE 110	Child and Adolescent Development	3
	ECE 116	Early Literacy Development	3
	EDB 202	Introduction to Education-Schools, Students and Society	3
		General Education Courses	
	ENG 101	College Composition	3
	Elective #	General Education Course	3
Second Semester		**Education Courses**	**Credits**
	ECE 117	Observing and Recording in the Field	3
	EDB 221	Educational Psychology	3
		General Education Courses	**Credits**
	Elective #	General Education Course	3
	Elective #	General Education Course	3
	Elective #	General Education Course	3-4
Third Semester		**Education Courses**	**Credits**
	EDB 204	The Teaching Process	3
	ECE 216	Survey of Exceptionalities	3
	EDB 232	Field Experience II	4
		General Education Courses	**Credits**
	Elective #	General Education Course	3
	Elective #	General Education Course	4
Fourth Semester		**Education Courses**	**Credits**
	EDB 115	Development and Guidance of Behavior	3
	EDB 233	Field Experience III	5
	Restricted Elective	Any Education (EDB) or Early Childhood Education (ECE) Course	3
		General Education Course	**Credits**
	Elective #	General Education Course^	3
		TOTAL A.A.S. DEGREE CREDITS	**61-62**

 # General Education Selections which are not dictated must be in this distribution and must be 100 level or higher

3 Credits – Communication

9 Credits – Humanities or Social Sciences

10 Credits– Math or Science (Minimum of one MAT course and one lab science)

^Students must enroll in one of two Essential Learning Outcome capstone courses - ENG215 or PSY214.

All students who wish to make use of transfer agreements may be more restricted.

Education -
Secondary Education (7-12) Option

Credential:

Associate in Applied Science Degree (61-62 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Education program with an option in Secondary Education is designed for future educators who wish to teach at the secondary level in a specific content area. The curriculum is flexible, allowing students to select one of four academic concentrations – English, Mathematics, Science or Social Studies. The curriculum includes five Education courses designed to introduce future educators to the field of Education to gain an understanding of American schools, how students learn, and the diverse needs of students in public school settings.

This degree is intended to increase access to academic advising within the Education program and ease transfer to other post-secondary institutions or prepare for related careers. Students are encouraged to review general education requirements for the college/university they wish to attend.

Key Learning Objectives:

Graduates of the Associate in Applied Science Degree in Secondary Education (7-12) will:

- describe the cognitive/linguistic, social/emotional, and physical development of adolescence;
- identify the traits of diversity in school aged students;
- use and interrupt objective observations for authentic assessment; and
- reflect on practices and engage in professional and ethical behaviors for continuous professional growth.

Education—A.A.S. Degree Secondary Education (7-12) Option			
First Semester		**Education Courses**	**Credits**
	ECE 110	Child and Adolescent Development	3
	EDB 202	Introduction to Education-Schools, Students and Society	3
		General Education Courses	
	ENG 101	College Composition	3
	PSY 101	Introduction to Psychology	3
	Elective #	General Education Course	3
Second Semester		**Education Courses**	**Credits**
	EDB 221	Educational Psychology	3
	Specialized Elective+	Academic Concentration Specialization Course	3
		General Education Courses	**Credits**
	PHI 101	Ethics	3
	Restricted Elective	Any Math (100 level or higher)	3
	Elective #	General Education Course	3
Third Semester		**Education Courses**	**Credits**
	ECE 216	Survey of Exceptionalities	3
	Specialized Elective+	Academic Concentration Specialization Course	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing	3
	Elective #	General Education Course	3
	Restricted Elective	Any Science (100 level or higher)	4
Fourth Semester		**Education Course**	**Credits**
	ECE117	Observing and Recording in the Field	3
		General Education Courses	**Credits**
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
	Elective #	General Education Course	3
	Elective #	General Education Course	3
	Elective #	General Education Course^	3
		TOTAL A.S. DEGREE CREDITS	**61-62**

+Academic Concentration Specialization Electives (6 credits of English, Mathematics, Science, or Social Sciences)
#General Education Course Electives (18 credits)

^Students must enroll in one of two Essential Learning Outcome capstone courses - ENG215 or PSY214.

Electrical and Automation Technology

Credential:

Associate in Applied Science Degree (64-66 credit hours)

Academic Requirements for Admission:

High School Level Algebra I, Algebra II, Geometry, and either Physics or Chemistry with Lab required. Must be familiar with Microsoft Office, e-mail, and the internet.

Program Overview:

Electrical and Automation Technology prepares students for exciting and well-paying career paths in the field of industrial control and automation. All manufacturing processes rely on electricity, electronics, sensors, communications, networks, motors, hydraulics and pneumatics, and computer control. The program provides sound theory reinforced by laboratory applications which reflect the expectations and responsibilities of graduates in the workplace.

Students receive a solid foundation in DC/AC theory, electrical machines and transformers, power distribution, basic wiring techniques, motor controls, programmable automation controllers, industrial electronics, digital electronics, data communications, hydraulics and pneumatics. Graduates are eligible to sit for the State of Maine Journeyman Electrician Exam. After having passed it, as well as having met the on-the-job experience requirements of the State Electrician Examining Board, they will receive their Journeyman Electrician license. Graduates assume employment in positions including industrial electrical and instrument technician, maintenance technician, engineering assistant, construction electrician, field representative, and many others.

The Electrical and Automation Technology program is an active partner with the Federal Aviation Administration (FAA) Collegiate Training Initiative (CTI) providing an internship and allowing graduates to apply directly to the FAA as a technician or specialist. EMCC is also a Certified Training and Education Site for FANUC Robotics Material Handling Program Software.

Key Learning Objectives*:*

Graduates with the Associate in Applied Science Degree in the Electrical and Automation Technology program will have strengths in the building, testing, operation, and maintenance of electrical systems.

Graduates will have demonstrated knowledge and hands-on competence with

- electrical and electronic circuit analysis using algebra, trigonometry, and advanced mathematical techniques;
- electrical and electronic drawings;
- pneumatic and hydraulic fluid power components and systems;
- process instrumentation and controls;
- electrical control systems, programmable automation controllers, and associated software;
- the National Electrical Code;
- test equipment; and
- industrial workplace safety procedures.

Electrical and Automation Technology—A.A.S. Degree			
First Semester		**E & A Technology Courses**	**Credits**
	CAD 101	Introduction to CADD	3
	EPT 116	DC Circuits	3
	EPT 176	Programmable Controllers	3
	EPT 245	Digital Electronics	3
		General Education Course	
	Restricted Elective	*Math sequence see below	3 or 4
Second Semester		**E & A Technology Courses**	**Credits**
	EPT 123	Power Distribution	3
	EPT 125	AC Electricity	3
	EPT 167	Fluid Power Technology	3
	EPT 173	DC/AC Machines	3
		General Education Course	**Credits**
	ENG 101	College Composition	3
Third Semester		**E & A Technology Courses**	**Credits**
	EPT 228	Industrial Electronics	3
	EPT 241	Linear Circuits	3
	EPT 296	Automation Projects I	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	PHY 121	Physics I	3
	PHY 122	Physics I Laboratory	1
	Res. Elective	*Math sequence see below	3 or 4
Fourth Semester		**E & A Technology Courses**	**Credits**
	EPT 155	National Electrical Code	3
	EPT 251	Control Systems	3
	EPT 298	Automation Projects II	3
		General Education Courses	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
	SPE 101	Oral Communications	3
		TOTAL A.A.S. DEGREE CREDITS	**64-66**

*MAT 119 College Algebra and MAT 120 College Trigonometry *or*
MAT120 College Trigonometry and MAT161 Introduction to Statistics *or*
MAT 120 College Trigonometry and MAT 217 Pre-Calculus *or*
MAT123 College Algebra and Trigonometry and MAT161 Introduction to Statistics *or*
MAT 217 Pre-Calculus and MAT 225 Calculus I *or*
MAT 225 Calculus I and MAT 226 Calculus II
^ELO Capstone

Electricians Technology

Credential:

Certificate (39 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

Electricians Technology is a part-time, evening program that provides a strong electrical/electronic foundation necessary to meet the increasing technological demands of the electrical trade. Designed for the individual interested in becoming a licensed electrician, this program provides the 576 hours of education needed to meet the licensing requirements of the State of Maine.

Upon successful completion of the program, the State of Maine Electrician Examining Board will allow the student to sit for the Journeyman's Examination. The Electricians Technology program also can be used to meet the educational requirements for various limited electrician licenses.

Students that successfully complete an electrical technology program at a secondary regional technical center may be eligible for up to three (3) credits toward EMCC's Electricians Technology Certificate.

Note: Electricians who want to upgrade skills or gain general knowledge may take individual courses without enrolling in the program.

The Electricians Technology Certificate is offered in a part-time, evening format. Students who wish to attend full-time should contact the Admissions Office to discuss scheduling options.

Electricians Technology—Certificate			
First Semester		**Electricians Technology Courses**	**Credits**
	ELC 100	Introduction to Electricians Technology	3
	ELC 111	Basic Electricity I	3
	ELC 151	Electrical Controls I	3
		General Education Course	**Credits**
	ENG 101	College Composition	3
Second Semester		**Electricians Technology Courses**	
	ELC 112	Basic Electricity II	3
	ELC 171	Electrical Blueprint Reading	3
		General Education Course	
	MAT 113	Technical Mathematics I	3
Third Semester		**Electricians Technology Courses**	
	ELC 152	Electrical Controls II	3
	ELC 161	Transformers	3
		General Education Course	
	PSY 101 PSY 211	Introduction to Psychology or Human Relations	3
Fourth Semester		**Electricians Technology Courses**	
	ELC 121	National Electrical Code	3
	ELC 131	Basic Electronics I	3
	ELC 141	Electric Motors	3
		TOTAL CERTIFICATE CREDITS	**39**

Emergency Medical Services

Credentials:

Associate in Applied Science Degree (65 credit hours)
Certificate (23.5 credit hours)

Academic Requirements for Admission:

A.A.S. Degree: High School Level Algebra I and science course with lab, EMT license.
Certificate: High School Level Algebra I and science course with lab, EMT license.

Program Overview:

The Emergency Medical Services (EMS) program provides the opportunity to earn a Certificate and/or an Associate in Applied Science Degree to individuals who work with ambulance services, rescue squads, fire services, and other first responder organizations. The program follows nationally recognized standards of instruction developed by the National Highway Traffic Administration (NHTSA) and prepares individuals for certification by the National Registry of EMTs on successful completion of the program and the required post-course examinations. The program is typically taken on a part-time basis over three or four years.

Awards of Completion are given at three levels as students complete technical courses and are prepared to sit for National certification examinations by the National Registry of EMTs which are a prerequisite to State licensure. These three Awards of Completion are:

- **Award for Emergency Medical Technology (EMT)**: EMS 123 is required.
- **Award for Advanced Emergency Medical Technician (A-EMT)**: EMS 123, EMS 201, EMS 202, EMS 205, and EMS 206 are required.

- **Award for Paramedic*:*** All A-EMT courses as well as EMS 208, EMS 210, EMS 231, EMS 212, EMS 233, EMS 214, EMS 215, EMS 216, and EMS 217.

The Emergency Medical Services program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP), 8301 Lakeview Parkway, Suite 111-312, Rowlett, TX 75088; phone 214-703-8992. www.coaemsp.org

Minimal Expectation: To prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician and/or Emergency Responder levels.

Key Learning Objectives*:*

Graduates with the Associate in Applied Science Degree will be able to:

- practice correct techniques when lifting and moving patients;
- demonstrate knowledge of prehospital pharmacology and medication administration practices and procedures;
- demonstrate management of specific emergencies including:
  - Environmental emergencies
  - Psychological emergencies
  - Obstetric and gynecological emergencies
  - Neonatal care and resuscitation
  - Airway management
  - Neurological emergencies
  - Endocrine emergencies
  - Infectious diseases
  - Advanced trauma management
  - Advanced cardiovascular management;
- develop and implement a plan of care in the prehospital environment that is individualized to the patient and situation;
- analyze and interpret diagnostic data to include cardiac ECG monitoring, basic laboratory studies, and patient vital signs; and

- demonstrate professional attributes in the affective domain characteristic of an EMS professional.

Emergency Medical Services—A.A.S. Degree			
		Emergency Medical Services Courses	**Credits**
	EMS 123	Emergency Medical Technician	5.5
	EMS 201	Fundamentals of EMS	3
	EMS 202	Cardiac/Respiratory Emergencies	3
	EMS 205	EMT-Intermediate Skills Seminar	2
	EMS 206	Intermediate Clinical Preceptorship and Field Internship	3
	EMS 208	Advanced Emergency Cardiovascular Care	4.5
	EMS 210	Paramedic Emergencies I	2.5
	EMS 212	Emergency Care Across the Lifespan	2.5
	EMS 214	Paramedic Skills Seminar	2
	EMS 215	Paramedic Clinical Preceptorship and Field Internship I	3
	EMS 216	Paramedic Clinical Preceptorship and Field Internship II	2
	EMS 217	Paramedic Clinical Preceptorship and Field Internship III	3
	EMS 231	Paramedic Emergencies II	3
	EMS 233	Paramedic Emergencies III	3
		General Education Courses	**Credits**
	BIO 121	Anatomy and Physiology I	3
	BIO 122	Anatomy and Physiology II	3
	BIO 124	Anatomy and Physiology I Laboratory	1
	BIO 126	Anatomy and Physiology II Laboratory	1
	ENG 101	College Composition	3
	Restricted Elective	Any Math (100 level or higher)	3
	Restricted Electives	Any Humanities or Social Sciences (100 level or higher)	6
	Restricted Elective	Any Communications (100 level or higher)	3
		TOTAL A.A.S. DEGREE CREDITS	**65**

Emergency Medical Services—Certificate			
		Emergency Medical Services Courses	**Credits**
	EMS 123	Emergency Medical Technician	5.5
	EMS 201	Fundamentals of EMS	3
	EMS 202	Cardiac/Respiratory Emergencies	3
	EMS 205	EMT-Intermediate Skills Seminar	2
	EMS 206	Intermediate Clinical Preceptorship and Field Internship	3
		General Education Courses	**Credits**
	BIO 121	Anatomy and Physiology I	3
	BIO 124	Anatomy and Physiology I Laboratory	1
	ENG 101	College Composition	3
		TOTAL CERTIFICATE CREDITS	**23.5**

Fine Woodworking and Cabinet Making Technology

Credential*:*

Associate in Applied Science Degree (61-62 credit hours)
Certificate (32 credit hours)

Academic Requirements for Admission:

A.A.S. Degree: High School Level Algebra I required. Algebra II, Geometry, and either Physics or Chemistry with Lab desired.
Certificate: High School Level Algebra I.

Program Overview:

The Fine Woodworking and Cabinet Making program provides students with a two-year option tailored for differing occupational goals. Students will gain the knowledge and skills necessary to plan and complete cabinetry projects. Students choose courses in drafting, cabinet layout, estimating, cabinet-making, furniture, and millwork. Students apply their studies by building different types of cabinets in each year of the program. The Fine Woodworking and Cabinet Making program provides the student with the knowledge and skills necessary to plan and complete cabinetry, furniture and millwork projects. Students learn to work with prints, specifications, and shop drawings. Emphasis is placed on selecting proper materials, determining the best procedures, manufacturing parts to specification, assembling, and finishing individual projects.

Students learn the fundamentals of working with wood in our well-equipped shop, from planning a project to adding the finishing details. From using traditional woodworking equipment and hand tools to the latest computer numerically controlled (CNC) machinery and software, students learn to plan and process wood in the most efficient manner. Students will learn the setup and operation of wood working machinery and equipment, breakout of lumber and panel components, laminating, veneering, machining, sanding, assembly and finishing.

Successful graduates of this program will have the skills necessary to become employed in a variety of custom woodworking environments

including cabinet shops, yacht building, architectural millwork, or furniture making. Beginning wages will vary depending on the shop at which the graduate is employed.

Key Learning Objectives:

Students who successfully complete the Associate in Applied Science Degree program will be able to:

- visualize, design, and prepare drawings and specifications for furniture and cabinets;
- describe the grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fiberboard, plastic laminates, adhesives, and abrasives;
- explain how the structure of wood and its mechanical and physical properties relate to the quality and performance of wood projects;
- produce high quality products by maintaining tolerances; using cut-off saws, jointer, planers, ripsaws, edge-gluing equipment; and utilizing finish machining operations involving the use of a variety of stationary and portable equipment to Woodworking Career Alliance standards;
- design, construct and use jigs and patters for machining and assembly operations; and
- setup machine operation and identify the various tooling requirements for specific CNC machines.

Fine Woodworking and Cabinet Making—A.A.S. Degree			
First Semester		**FWC Technology Courses**	**Credits**
	DTG 123	Drafting for Cabinetmaking I	3
	FWC 102	Basic Woodworking I	3
	FWC 103	Basic Woodworking II	4
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**FWC Technology Courses**	**Credits**
	DTG 125	Drafting for Cabinetmaking II	3
	FWC 111	Woodworking	7
		General Education Courses	**Credits**
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
Third Semester		**FWC Technology Courses**	**Credits**
	DTG 225	Drafting for Cabinetmaking III	3
	FWC 201	Basic Cabinetmaking and CNC	7
		General Education Course	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
Fourth Semester		**FWC Technology Course**	**Credits**
	FWC 211	Advanced Cabinetmaking	7
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	Any Communications, Humanities, Math, Science, or Social Science (100 level or higher)	3
	Free Elective	Any course 100 level or higher	3
		TOTAL A.A.S. DEGREE CREDITS	**61-62**

^ELO Capstone

Fine Woodworking and Cabinet Making—Certificate			
First Semester		**FWC Technology Courses**	**Credits**
	DTG 123	Drafting for Cabinetmaking I	3
	FWC 102	Basic Woodworking I	3
	FWC 103	Basic Woodworking II	4
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**FWC Technology Courses**	**Credits**
	DTG 125	Drafting for Cabinetmaking II	3
	FWC 111	Woodworking	7
		General Education Courses	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
	Restricted Elective	Any Communications, Humanities, Math, Science, or Social Science (100 level or higher)	3
		TOTAL CERTIFICATE CREDITS	**32**

Fire Science Technology

Credentials:

Associate in Applied Science Degree – In-Service Track (61 credit hours)
Associate in Applied Science Degree – Live-In Student Track (60.5 credit hours)
Certificate (31 credit hours)

Academic Requirements for Admission:

High School Level Algebra I required. Geometry desired.

Program Overview*:*

The Fire Science Technology program is designed to provide students with sound technical and academic experiences, enabling them to assume positions of responsibility as members of fire departments or as technical employees of industrial firms and insurance companies.

The first year of the program provides training in building construction, system design for detecting and eliminating fire hazards, and trains students to reduce hazards through periodic inspections, remedial recommendations, and systematic follow-ups. The second year focuses on aspects of leadership, command, control, and education.

The ultimate goal is to assist the in-service student to develop the appropriate skills and knowledge to further their ability as a front-line firefighter, but also to develop the skills to assume a leadership role in their community. Students who are not employed in a related field are highly encouraged to pursue a live-in position or other hands-on application of the curriculum.

Graduates of the Associate in Applied Science Degree program are prepared to assume positions of leadership within their department, and to manage teams performing tasks in the community and on the fire ground.

Graduates of the program will be employed as industrial fire protection specialists, safety technicians, fire insurance inspectors, inspection bureau representatives, state fire inspectors, and municipal fire department employees, many of whom will earn their degree while employed in their area of specialty.

All Fire Science Technology students are strongly encouraged to take EMS 123 (EMT) and to complete the Firefighter I/II certification. Both of these will be needed for employment by a fire department. Live-in students will complete FFI/II during the summer before school and should complete EMS 123 in their first semester.

Courses may also be taken individually or in clusters to meet National Fire Protection Association (NFPA) Certification for various fire science professional standards.

Live-in Student Firefighter Externship:

The Live-In Firefighter Externship is offered in cooperation with various area fire departments. Through this externship students are hired to live in area fire houses (rent free) in exchange for being "on call" during specific hours.

Admission to the Live-In Student Firefighter program is not guaranteed (space is limited) and depends upon a successful job interview and satisfactory completion of pre-service training. Early application for the limited live-in positions is strongly encouraged.

Live-in students have a greater persistence rate with 85% reaching graduation within three years. Live-in students have a greater success rate in classes because they apply what they learn on a daily basis. In addition, these students have access to members of their host departments who can tutor them on topics and skills.

Key Learning Objectives*:*

Graduates with the Associate in Applied Science Degree will be prepared 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 the fire/rescue service; and
- access, evaluate, and synthesize information independently using appropriate technology.

Fire Science Technology—A.A.S. Degree In-Service Track			
First Semester		**Fire Science Technology Courses**	**Credits**
	FIR 105	Introduction to Emergency Services	3
	FIR 110	Fire Protection Systems	3
	FIR 115	Fire Service Building Construction	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	MAT 113 Technical Mathematics I or higher level math	3
Second Semester		**Fire Science Technology Courses**	**Credits**
	FIR 152	Fire Inspection and Prevention	3
	FIR 155	Fire Science Hydraulics	3
		General Education Courses	**Credits**
	CHE 103	Chemistry for Emergency Responders	3
	Restricted Elective	MAT 114 Technical Mathematics I or higher level math	3
	Restricted Elective	Any Social Science (100 level or higher)	3
Third Semester		**Fire Science Technology Courses**	**Credits**
	FIR 202	Hazardous Incident Management	3
	FIR 215	Fire Service Leadership	3
	FIR/EMS*	Fire Science Elective	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	PHY 108	Survey of Applied Physics	4
Fourth Semester		**Fire Science Technology Courses**	**Credits**
	FIR 250	Fire Ground Operations	3
	FIR 260	Fire Administration	3
	FIR/EMS*	Any Fire Science or EMS	3
		General Education Courses	**Credits**
	Restricted Elective	Any Social Science/Humanities	3
	Restricted Elective	Any Communications, Humanities, or Social Science (100 level or higher)	3
		TOTAL A.A.S. DEGREE CREDITS	**61**

***FIR/EMS Elective Options**: FIR 101 Firefighter I, FIR 102 Firefighter II, FIR 104 Emergency Telecommunicator-Basic, FIR 127 Fire Science Learning Seminar, FIR 131 Fire Behavior and Combustion, FIR 165 Wildlife Fire Management for Firefighters, FIR 207 Fire and Life Safety Educator, FIR 210 Fire Service Instructor, FIR221 Fire Investigation and Analysis, and select EMS courses. ^ELO Capstone

Fire Science Technology—A.A.S. Degree Live-in Student Track			
First Semester		**Fire Science Technology Courses**	**Credits**
	EMS 123	Emergency Medical Technician	5.5
	FIR 110	Fire Protection Systems	3
	FIR 115	Fire Service Building Construction	3
		General Education Course	**Credits**
	Restricted Elective	MAT 113 Technical Mathematics I <u>or</u> higher level math	3
Second Semester		**Fire Science Technology Courses**	**Credits**
	FIR 152	Fire Inspection and Prevention	3
	FIR 155	Fire Science Hydraulics	3
		General Education Courses	**Credits**
	CHE 103	Chemistry for Emergency Responders	3
	ENG 101	College Composition	3
	Restricted Elective	MAT 114 Technical Mathematics I <u>or</u> higher level math	3
Third Semester		**Fire Science Technology Courses**	**Credits**
	FIR 202	Hazardous Incident Management	3
	FIR 215	Fire Service Leadership	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	PHY 108	Survey of Applied Physics	4
	Restricted Elective	Any Social Science (100 level or higher)	3
Fourth Semester		**Fire Science Technology Courses**	**Credits**
	FIR 250	Fire Ground Operations	3
	FIR 260	Fire Administration	3
	FIR/EMS*	Any Fire Science or EMS	3
		General Education Courses	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
	Restricted Elective	Any Communications, Humanities, or Social Science (100 level or higher)	3
		TOTAL A.A.S. DEGREE CREDITS	**60.5**

^ELO Capstone

Fire Science Technology—Certificate			
First Semester		**Fire Science Technology Courses**	**Credits**
	FIR 110	Fire Protection Systems	3
	FIR 115	Fire Service Building Construction	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	MAT 113 Technical Mathematics I or higher level math	3
	Restricted Elective	Any Social Science (100 level or higher)	3
Second Semester		**Fire Science Technology Courses**	**Credits**
	FIR 152	Fire Inspection and Prevention	3
	FIR 155	Fire Science Hydraulics	3
	FIR/EMS*	Fire Science Elective	3
		General Education Courses	**Credits**
	CHE 103	Chemistry for Emergency Responders	3
	PHY 108	Survey of Applied Physics	4
		TOTAL CERTIFICATE CREDITS	**31**

***FIR/EMS Elective Options**: FIR 101 Firefighter I, FIR 102 Firefighter II, FIR 104 Emergency Telecommunicator-Basic, FIR 105 Introduction to Emergency Services, FIR 127 Fire Science Learning Seminar, FIR 165 Wildlife Fire Management for Firefighters, FIR 207 Fire and Life Safety Educator, FIR 210 Fire Service Instructor, FIR 221 Fire Investigation and Analysis, and select EMS courses.

All students who intend to be front-line firefighters must complete EMS 123 and FFI/FFII in order to qualify for jobs at full-time departments. Most departments are now hiring FFII/Paramedics.

Firefighter I/II will be credited as a fire science elective (6 credits) provided the student has passed the State certification test and provides proper documentation. State licensure as an EMT will be credited as a fire science elective.

Hospitality and Tourism Management

Credential:

Certificate (30 credit hours)

Academic Requirements for Admission:

High School Level Algebra I required. Algebra II and one lab science desired.

Program Overview:

A Certificate in Hospitality and Tourism Management from Eastern Maine Community College offers a diverse mix of career choices and opportunities. Foodservice management positions as well as lodging management and hotel operations top the list of many. Some graduates may be interested in resort management or positions in the airline Industry, sustainable tourism, event management and entertainment arts management. With training in customer service, as well as comprehensive management and marketing techniques and a solid foundation of general education courses, the program includes the building blocks for a rewarding and exciting career. Successfully completing the program will open the door to a variety of lucrative career opportunities. Transfer education or entrepreneurship as well as immediate employment with a vast number of major corporations are just some of the options that a certificate in Hospitality and Tourism Management can offer.

Graduates from the program may receive Nationally recognized certification in Hospitality Management and Managing Front Desk Operations, Foodservice Sanitation, Fundamentals of Alcohol Service as well as other certifications under the auspices of the Education Foundation of the National Restaurant Association and the American Hotel and Lodging Association.

Key Learning Objectives*:*

Graduates with a Certificate in Hospitality and Tourism Management will be able to perform at both entry-level and mid-level positions in the areas of front desk management and reservations, front line management and supervisory positions in a variety of hospitality and tourism relation positions.

Graduates of Hospitality and Tourism Management will:

- select methods of insuring quality control rooted in sales and marketing;
- determine which laws and regulations govern the various industry sectors;
- develop customer service related programs; and
- invent systems that promote teamwork environments.

Hospitality and Tourism Management – Certificate			
First Semester		**Technology Courses**	**Credits**
	HTM105	Principles of Hospitality	3
	HTM115	Lodging Management	3
	HTM 133	Beverage Controls	3
	HTM142	Hospitality Law	3
		General Education Course	**Credits**
	ENG 101	College Composition	3
Second Semester		**Technology Courses**	**Credits**
	HTM152	Planning and Development in Tourism	3
	HTM162	Meetings and Convention Management	3
	HTM172	Hospitality Division Management	3
		General Education Courses	**Credits**
	SPE101	Oral Communication	3
	GEO107	Geography	3
		TOTAL CERTIFICATE CREDITS	**30**

Human Services

Credential:

Associate in Applied Science Degree (61 credit hours)

Academic Requirement for Admission*:*

High School Level Algebra I

Program Overview*:*

This degree program focuses on the knowledge and skills required to work in today's diverse field of Human Services. Graduates will be prepared for employment within social service organizations, hospitals, programs for the elderly, and community mental health centers. Graduates will be qualified to apply for the Mental Health Rehabilitation Technician/Community (MHRT/C) certification offered through the State of Maine.

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree in Human Services will:

- demonstrate knowledge of current principles of elementary counseling necessary to engage and interact with clients and their families while being sensitive to diversity and culture;
- engage in professional behaviors including confidentiality, ethical practices and remaining professionally competent;
- apply strategies that support empowerment and choice for clients utilizing formal and informal supports in the community; and
- analyze problems that occur when working with clients and collaborate with team members to develop interventions and supports to address these challenges.

Human Services – A.A.S. Degree			
First Semester		**Human Services Courses**	**Credits**
	HUS 101	Community Mental Health	3
	HUS 110	Interviewing and Counseling	3
	HUS 120	Crisis Identification and Intervention	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	PSY 101	Introduction to Psychology	3
Second Semester		**Human Services Courses**	**Credits**
	HUS 130	Psychosocial Rehab	3
	HUS 140	Understanding Diversity in Human Services	3
		General Education Courses	**Credits**
	SOC 101	Introduction to Sociology	3
	Elective #	Math Elective	3
	Elective #	Restricted Elective	3
Third Semester		**Human Services Courses**	**Credits**
	HUS 210	Sexual Abuse, Trauma and Recovery	3
	HUS 220	Substance Abuse	3
	HUS 230	Social Services for the Elderly	3
		General Education Courses	**Credits**
	Elective #	Science Elective	4
	Elective #	Restricted Elective	3
Fourth Semester		**Human Services Courses**	**Credits**
	HUS 240	Case Management	3
	HUS 250	Vocational Aspects of Disability	3
		General Education Courses	**Credits**
	Elective #	Communication Elective	3
	Elective #	Restricted Elective	3
	Elective #	Open Elective	3
		TOTAL A.A.S. DEGREE CREDITS	**61**

 # General Education Selections which are not dictated must be in this distribution, must be 100-level or higher, and must also include either ENG 215 or PSY 214
3 Credits – Communication (in addition to College Comp)
3 Credits – Math (100 level or higher)
3 Credits – Science
9 Credits – Restricted electives (choose 3 of the following – ASL 101, ASL 102, PHI 101, PSY 231, PSY 235, SOC 201, EDB 213 or EDB 231)
3 Credits – Open Elective

Liberal Studies

Credential:

Associate in Arts Degree (60-63 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Associate in Arts Degree with a concentration in Liberal Studies is a broad-based educational program with a curriculum spanning a wide range of academic areas. These areas include: Humanities, Communication/English, Social Science, Mathematics, Computer Applications, and Laboratory Science.

Primarily, this degree is intended to ease transfer into some baccalaureate programs at other post-secondary institutions. Additionally, from the Liberal Studies program, students may apply for entry into various professional and technical programs offered at Eastern Maine Community College as well as throughout the Maine Community College System.

Students are encouraged to explore in depth a particular academic discipline and also to enhance their education by electing career- and skill-specific courses offered through the other programs on campus.

Upon successful completion of at least 60 credit hours in the specific curriculum areas, and with a minimum grade point average of 2.0, the student will be awarded the Associate in Arts Degree in Liberal Studies. All courses including electives must be at 100 or higher level.

A guaranteed admissions agreement, **AdvantageU,** was signed by the University of Maine System and the Maine Community College System in 2005. The **AdvantageU** program is designed to provide community college students with a streamlined transfer process into the Maine public university of their choice, following completion of their Associate in Arts Degree. Information and application procedures for the **AdvantageU** program are located at http://www.emcc.edu/beyond-emcc/transferring/advantageu/.

Key Learning Objectives

- Students will participate in, identify, or evaluate artistic and creative forms of expression. (CREATIVE/ARTS)
- Students will engage in laboratory or field work at a level consistent with standard college laboratory and field courses. Students will demonstrate the ability to work with both qualitative and quantitative information in applying the scientific method. (NATURAL SCIENCE)
- Students will be able to write clear, coherent texts with adherence to proper mechanics. Students will be able to effectively use writing as a means to engage in and communicate processes of critical inquiry, including analysis, synthesis, and argumentation. (WRITING)
- Students will be able to reliably perform mathematical operations at the college level. Students will be able to apply mathematical concepts and techniques in practical situations, to solve problems. (QUANTITATIVE LITERACY)
- Students will analyze or interpret significant texts or other cultural artifacts and will understand or think critically about meaning and value, from either an aesthetic, philosophical, or multidisciplinary perspective. (HUMANITIES)
- Students will analyze or explain casual forces which shape social structures, institutions, or behavior. (SOCIAL SCIENCES)
- Students will explain the premises of ethical decision making and apply a framework for making rational choices when faced with ethical dilemmas. (ETHICAL REASONING)
- Students will demonstrate knowledge of cultural differences. (DIVERSITY/CULTURAL KNOWLEDGE)

Liberal Studies—A.A. Degree			
First Semester		**Liberal Studies Courses**	**Credits**
	ENG 101	College Composition[1]	3
	FYE 100	College Success Course *Substitutions allowed for students with 12 credit hours or more of transfer credit*	1
	SOC 101	Introduction to Sociology[5]	3
	Math Elective	Any Math (100 level or higher)[2] *MAT 161, MAT 217 or MAT 225 recommended*	3-4
	Free Elective	Any course 100 level or higher	3
	Free Elective	Any course 100 level or higher	3
Second Semester		**Liberal Studies Courses**	**Credits**
	ENG 112	Introduction to Literature[6]	3
	PSY 101	Introduction to Psychology[5]	3
	Writing Elective	Any Writing (100 level or higher)[1]	3
	Free Elective	Any course 100 level or higher	3
	Free Elective	Any course 100 level or higher	3
Third Semester		**Liberal Studies Courses**	**Credits**
	Creative Arts Elective	(100 level or higher)[4]	3
	Humanities Elective	Any History (100 level or higher)[6]	3
	Science Elective	Any Lab Science (100 level or higher)[3]	4
	Free Elective	Any course 100 level or higher	3
	Free Elective	Any course 100 level or higher	3
Fourth Semester		**Liberal Studies Courses**	**Credits**
	Capstone Course	*Select One:* ENG 215 Business and Technical Writing PSY 214 Teams - Principles and Practices	3
	PHI 101	Ethics[8]	3
	Diversity Elective	(100 level or higher)[7]	3
	Free Elective	Any course 100 level or higher	3
	Free Elective	Any course 100 level or higher	0-3
		TOTAL A.A. DEGREE CREDITS	**60-63**

Credit Hour Distribution:

MCCS/EMCC Distribution Area Area	
Writing	6 Credits
Quantitative Literacy	3-4 Credits
Natural Science	4 Credits
Creative Arts	3 Credits
Social Sciences	6 Credits
Humanities	6 Credits
Diversity	3 Credits
Ethical Reasoning	3 Credits
FYE 100	1 Credit
Free Electives	25-26 Credits
	60 Credits

UMS Transfer Block Distribution	
Writing[1]	6 credits
Quantitative Literacy[2]	3-4 Credits
Natural Science[3]	4 Credits
Creative Arts[4]	3 Credits
Social Sciences[5]	6 Credits
Humanities[6]	6 Credits
Diversity[7]	3 Credits
Ethical Reasoning[8]	3 Credits
	34-35 Credits

[1]Writing – ENG101 + One of the Following:

ENG 116 Journalism Seminar
ENG 162 Creative Non-Fiction Writing
ENG 172 Creative Writing
ENG 205 Advanced Composition & Peer Tutoring
ENG 215 Business and Technical Writing

[2]Mathematics – One of the Following Recommended:

MAT 103 Thinking Mathematically (Quantitative Reasoning)
MAT 107 Elementary Descriptive Geometry (Education)
MAT 108 Elementary Numerical Mathematics (Education)
MAT 119 College Algebra
MAT 161 Introduction to Statistics
MAT 217 Pre-Calculus (STEM)
MAT 225 Calculus I (STEM)

[3]Science – One of the Following:

BIO 100 Concepts in Biology
BIO 109 Principles of Biology I
BIO 127 Anatomy and Physiology I
CHE 100 Chemistry for Everyday Living
CHE 113/115 Chemistry I with Lab
NUT 221 Nutrition
PHY108 Survey of Applied Physics
PHY 121/122 Physics I with Lab
SCI 201 Field Natural History

[4]Creative Arts – One of the Following:

ART 100 Drawing I
ART 101 Introduction to Digital Photography
ART 112 2-D Design

ART 125 3-Dimensional Design
ART 291 Topics in Fine Art
DGD 113 Introduction to Photoshop
ENG 162 Creative Non-Fiction Writing
ENG 172 Creative Writing
ENG 212 Introduction to Film
ENG 214 Topics in Film
ENG 223 Science Fiction and Fantasy Literature
ENG 224 The Graphic Novel
ENG 225 Literature by Women
ENG 227 British Literature I
ENG 228 British Literature II
ENG 241 Introduction to Drama
MUS 123 Understanding Music
SPE 101 Oral Communication

[5]Social Science (SOC101 and PSY101 Required)

[6]Humanities – ENG 112 + One of the Following:
HIS 103 United States History to 1877
HIS 104 United States History 1877 to Present
HIS 105 History of Science and Technology
HIS 106 Food in History
HIS 114 World History to 1700
HIS 115 World History 1700 to Present
HIS 121 Maine History

[7]Diversity – One of the Following:
ASL 101 Introduction to American Sign Language I
ASL 102 American Sign Language II
ECO 200 Money and Life
ENG 212 Introduction to Film
ENG 225 Literature by Women
ENG 243 Folklore, Fairytales, Mythology and Legend
GEO 107 Geography
KOR 101 Beginning Korean
KOR 102 Beginning Korean II
MUS 123 Understanding Music
PSY231 Developmental Psychology
PSY 235 Abnormal Psychology
PSY 252 Serial Murder
PSY 253 Psychology of Cults
SOC 151 Environment and Society
SOC 201 Understanding the Family
SOC 214 Contemporary Social Problems

[8]Ethical Reasoning (PHI 101 Required)

Medical Assistant Technology

Credential:

Associate in Applied Science Degree (61 credit hours)

Academic Requirements for Admission:

High School Level Algebra I and Biology with Lab required.

Program Overview*:*

Medical Assistants are multi-skilled allied health professionals specifically trained to work in ambulatory settings such as physician's offices, clinics and group practices, performing administrative and clinical procedures. Students are provided with extensive hands-on training in both entry-level and advanced medical assistant competencies in accordance with the Standards and Guidelines for the Accreditation of Educational Programs in Medical Assisting. Graduates from the Medical Assistant Technology program are eligible to sit for the American Association of Medical Assistants (AAMA) certification examination upon successful completion of the program.

Graduates must complete 61 credits in the Medical Assistant program and achieve a minimum grade of **C** in all Medical Assisting courses. (Students must attain a final GPA of 2.0 or higher.)

The Medical Assistant Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 N, Suite 158
Clearwater, FL 33763
727-210-2350
www.caahep.org

Key Learning Objectives:

To prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Graduates with the Associate in Applied Science Degree in Medical Assistant Technology are expected to:

- utilize and understand appropriate medical terminology;
- apply a basic understanding of human anatomy and physiology and common disease processes in the role of a medical assistant;
- demonstrate a basic understanding of the concepts of pharmacology and applied mathematics;
- demonstrate a basic understanding of medical law and expected ethical behavior for individuals working in the healthcare field;
- practice concepts of effective communication with patients, their families and the healthcare team;
- demonstrate administrative competency in the following: administrative functions, basic practice finances, third party reimbursement, procedural and diagnostic coding, and legal implications;
- demonstrate clinical competency in the following: fundamental procedures, specimen collection, diagnostic testing, and patient care;
- describe dietary nutrients and identify special dietary needs; and
- define and demonstrate infection control and protective practices.

Medical Assistant Technology—A.A.S. Degree			
First Semester		**Medical Assistant Technology Courses**	**Credits**
	BCA 115	Introduction to Computer Applications	3
	BMT 113	Introduction to Medical Terminology	3
	MAS 101	Introduction to Medical Assisting	1
		General Education Courses	**Credits**
	BIO 127	Anatomy and Physiology I	4
	ENG 101	College Composition	3
Second Semester		**Medical Assistant Technology Courses**	**Credits**
	MAS 111	Clinical Procedures I & Lab	4
	MAS 121	Medical Office Procedures	3
	MAS 131	Math Methods for Medical Assistants	3
		General Education Courses	**Credits**
	BIO 128	Anatomy and Physiology II	4
	PSY 101	Introduction to Psychology	3
Third Semester		**Medical Assistant Technology Courses**	**Credits**
	BMT 121	Medical Law and Ethics	3
	MAS 201	Principles of Pharmacology	3
	MAS 211	Clinical Procedures II & Lab	4
	MAS 221	Insurance Coding for the Medical Office	3
		General Education Course	**Credits**
	PSY 231	Developmental Psychology	3
Fourth Semester		**Medical Assistant Technology Course**	**Credits**
	MAS 231	Medical Assistant Externship	5
	MAS 232	Advanced Medical Assistant Externship (optional)	1
		General Education Courses	**Credits**
	BIO 222	Pathophysiology	3
	ENG 215	Business & Technical Writing^	3
	Free Elective	Any course 100 level or higher	3
		TOTAL A.A.S. DEGREE CREDITS	**61-62**

^ELO Capstone

Medical Office Technology

Credential:

Associate in Applied Science Degree (62 credit hours)

Academic Requirements for Admission:

High School Level Algebra I, Biology with Lab, and English Composition required.

Program Overview:

The Associate in Applied Science Degree in Medical Office Technology is designed to prepare students for employment in physicians' offices, clinics, hospitals, and other health care facilities. With the ever-changing medical climate, the demand for trained office professionals in health care is growing. This program will prepare students to be proficient in a number of vital skill areas including medical coding and billing, transcription, health record maintenance, scheduling, and software applications.

Key Learning Objectives:

Graduates of the Associate in Applied Science Degree in Medical Office Technology will:

- utilize Word, Excel, PowerPoint, Access, and email software applications competently;
- interpret and utilize appropriate medical terminology;
- compose accurate correspondence using appropriate formatting, editing, and language skills;
- assign appropriate ICD-10-CM and CPT codes for basic procedures and diagnoses;
- schedule appointments, record patient information, file insurance claims, manage accounts receivable, and process insurance claim forms adhering to legal restrictions; and
- adhere to security, privacy, and confidentiality policies and laws.

Medical Office Technology—A.A.S. Degree			
First Semester		**Medical Office Technology Courses**	**Credits**
	BCA 101	Document Processing/Formatting	2
	BMT 113	Medical Terminology I	3
	BMT 133	Introduction to Medical Coding	3
	BUA 105	Business Communications	3
		General Education Course	**Credits**
	BIO 127	Anatomy and Physiology I	4
Second Semester		**Medical Office Technology Courses**	**Credits**
	BCA 115	Introduction to Computer Applications	3
	BMT 114	Medical Terminology II	3
		General Education Courses	**Credits**
	BIO 128	Anatomy and Physiology II	4
	ENG 101	College Composition	3
	Restricted Elective	Any Math (100 level or higher)	3
Third Semester		**Medical Office Technology Courses**	**Credits**
	BCA 116	Database Management	3
	BMT 121	Medical Law and Ethics	3
	BMT 206	Medical Billing & Reimbursement Methodologies	3
	BMT 221	Medical Transcription I	3
		General Education Course	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
Fourth Semester		**Medical Office Technology Courses**	**Credits**
	BCA 202	Integrated Software Applications	3
	BMT 204	Medical Office Procedures	4
	BMT 261	Health Unit Coordinator	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	PSY 214 Teams – Principles and Practices or Any Humanities or Social Science (100 level or higher)	3
		TOTAL A.A.S. DEGREE CREDITS	**62**

^ELO Capstone

Medical Office Technology — Coding Option

Credential:

Associate in Applied Science Degree (62 credit hours)

Academic Requirements for Admission:

High School Level Algebra I, Biology with Lab, and English Composition required.

Program Overview:

The Associate in Applied Science Degree in Medical Office Technology–Coding Option is designed to prepare students for employment as medical coders in physicians' offices, clinics, hospitals, and other health care facilities. Graduates of this program will have the necessary skills and knowledge to use, analyze, and assign proper codes to medical procedures and diagnoses for the purposes of billing and insurance. Students will be prepared to sit for the CPC (Certified Professional Coder) or COC (Certified Outpatient Coding) exam for National certification.

Key Learning Objectives:

Graduates of the Associate in Applied Science Degree in Medical Office Technology – Coding Option will:

- review and assign accurate medical codes for diagnoses, procedures, and services performed by physicians and other qualified healthcare providers in the office or facility setting (eg, inpatient hospital);
- review and assign accurate medical codes for diagnoses, procedures and services performed in the outpatient setting [emergency department visits, outpatient clinic visits, same day surgeries, diagnostic testing (radiology and laboratory), and outpatient therapies (physical therapy, occupational therapy, speech therapy, and chemotherapy];
- demonstrate proficiency in code assignment for evaluation and management, anesthesia, surgery, radiology, pathology, and medicine;
- exhibit knowledge of medical coding guidelines and regulations;

- display a knowledge of anatomy, physiology, and medical terminology necessary to correctly code provider diagnosis and services;
- correctly complete a CMS 1500 for ASC services and UB04 for outpatient services, including the appropriate application of modifiers; and
- demonstrate working knowledge in the assignment of ICD-10-CM codes from Volumes 1 & 2.

Medical Office Technology – Coding Option—A.A.S. Degree			
First Semester		**MOT- Coding Courses**	**Credits**
	BCA 101	Document Processing/Formatting	2
	BMT 113	Medical Terminology I	3
	BMT 133	Introduction to Medical Coding	3
	BUA 105	Business Communications	3
		General Education Courses	**Credits**
	BIO 127	Anatomy and Physiology I	4
Second Semester		**MOT- Coding Courses**	**Credits**
	BCA 115	Introduction to Computer Applications	3
	BMT 114	Medical Terminology II	3
	BMT 232	ICD-10-CM Diagnostic Coding	3
		General Education Courses	**Credits**
	BIO 128	Anatomy and Physiology II	4
	ENG 101	College Composition	3
Third Semester		**MOT- Coding Courses**	**Credits**
	BMT 121	Medical Law and Ethics	3
	BMT 206	Medical Billing & Reimbursement Methods	3
	BMT 233	CPT Procedural Coding	3
		General Education Courses	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
	Restricted Elective	Any Math (100 level or higher)	3
Fourth Semester		**MOT- Coding Courses**	**Credits**
	BMT 204	Medical Office Procedures	4
	BMT 234	ICD-10-PCS Coding	3
	Restricted Elective	Technology (see list below)	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	PSY 214 Teams – Principles and Practices or Any Humanities or Social Science (100 level or higher)	3
		TOTAL A.A.S. DEGREE CREDITS	**62**

Technology Restricted Elective Options: BCA 116 Database Management, BCA 202 Integrated Software Applications, BMT 221 Medical Transcription I, BMT 261 Health Unit Coordinator, or BMT 281 Medical Office Externship

^ELO Capstone

Medical Office Technology – Advanced Certificate in Medical Coding

Credential:

Advanced Certificate (16 credit hours)

Academic Requirements for Admission:

Must have an Associate Degree or higher in an allied health field. BMT 113 Medical Terminology (or equivalent) and a college-level biology course.

Medical Office Technology – Advanced Certificate in Medical Coding			
		Required Curriculum	**Credits**
	BMT 133	Introduction to Medical Coding	3
	BMT 232	ICD-10-CM Diagnostic Coding	3
	BMT 233	CPT Procedural Coding	3
	BMT 234	ICD-10-PCS Coding	3
		Restricted Electives: **Choose 4 credits from the following:**	**Credits**
	BCA 116	Database Management	3
	BIO 222	Pathophysiology	3
	BMT 221	Medical Transcription I	3
	BMT 252	Pharmacology for the Medical Office	3
	BMT 235	Certified Outpatient Coding Exam Prep	1
	BMT 236	Certified Professional Coder Exam Prep	1
		TOTAL ADVANCED CERTIFICATE CREDITS	**16**

Medical Office Technology – Computer Applications Specialist Certificate

Credential:

Certificate (33 credit hours)

Academic Requirements for Admission:

High School Level Algebra I, Biology with Lab, and English Composition required.

Program Overview:

This program will prepare graduates to perform clerical and administrative duties in any office setting. Duties may include routine keyboarding, operation of computer software, data entry, scheduling appointments, and related tasks.

Medical Office Technology Computer Applications Specialist Certificate			
First Semester		**Technology Courses**	**Credits**
	BCA 101	Document Processing/Formatting	2
	BCA 115	Introduction to Computer Applications	3
	BMT 113	Medical Terminology I	3
	BMT 121	Medical Law and Ethics	3
	BMT 207	Electronic Medical Record	1
	BUA 105	Business Communications	3
		General Education Course	**Credits**
	ENG 101	College Composition	3
Second Semester		**Technology Courses**	**Credits**
	BCA 116	Database Management	3
	BCA 202	Integrated Software Applications	3
	BMT 261	Health Unit Coordinator	3
		General Education Courses	**Credits**
	PSY 211	Human Relations	3
	Restricted Elective	Any Math (100 level or higher)	3
		TOTAL CERTIFICATE CREDITS	**33**

Medical Office Technology – Health Care Secretary Certificate

Credential:

Certificate (34 credit hours)

Academic Requirements for Admission:

High School Level Algebra I and English Composition required.

Program Overview:

This program will prepare graduates to perform clerical and administrative duties in a medical office and in a hospital setting. Duties may include routine typing, operation of computer software, preparing and maintaining medical records, scheduling appointments, and related tasks. Graduates from this program will have the necessary skills to work in a variety of settings, including medical clinics, doctors' offices, and hospitals.

Medical Office Technology - Health Care Secretary Certificate			
First Semester		**Technology Courses**	**Credits**
	BCA 101	Document Processing/Formatting	2
	BCA 115	Introduction to Computer Applications	3
	BMT 113	Medical Terminology I	3
	BMT 121	Medical Law and Ethics	3
	BMT 207	Electronic Medical Record	1
	BUA 105	Business Communications	3
		General Education Course	**Credits**
	Restricted Elective	Any Math (100 level or higher)	3
Second Semester		**Technology Courses**	**Credits**
	BCA 116	Database Management	3
	BIO 127	Anatomy and Physiology I	4
	BMT 114	Medical Terminology II	3
	BMT 261	Health Unit Coordinator	3
		General Education Course	**Credits**
	ENG 101	College Composition	3
		TOTAL CERTIFICATE CREDITS	**34**

Medical Radiography

Credentials:

Associate in Science Degree (78-81 credit hours)
Associate in Science Degree – Three Year Track (79-85 credit hours)

Academic Requirements for Admission:

High School Level Algebra I, Algebra II, Geometry, Biology with Lab, and either Physics (preferred) or Chemistry with Lab. Pre-admission testing required.

Program Overview:

Medical Radiography is a two-year or three-year program that integrates scientific concepts into working skills though classroom study and intensive clinical experience. The program concentrates on diagnostic radiology, including angiography and computerized tomography. Other imaging modalities such as nuclear medicine, radiation therapy, sonography, and magnetic resonance imaging are briefly discussed.

Medical radiographers are health professionals who combine technical knowledge with radiographic and anatomical knowledge to obtain diagnostic images of all parts of the human body. Successful radiographers must have a good working knowledge of human anatomy, radiographic positioning, radiologic physics, equipment operation, and quality assurance. As members of a health care team, radiographers must also understand and apply principles of good patient care, and conduct themselves in accordance with medical ethical standards.

Graduates are eligible to sit for the National certification examination administered by the American Registry of Radiologic Technologists (ARRT), and to apply for Maine licensure in radiography.

The Medical Radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182.

Key Learning Objectives:

GOAL #1 STUDENTS WILL DEMONSTRATE CLINICAL COMPETENCE

- Students will demonstrate knowledge of imaging principles – technical selection
- Students will demonstrate competence in positioning skills
- Students will provide patient care essential to medical imaging procedures
- Students will demonstrate radiation protection
- Students will demonstrate competence in routine surgical procedures

GOAL #2 STUDENTS WILL DEMONSTRATE PROFESSIONALISM

- Students will adhere to all program and clinical affiliate policies
- Students will participate as members of their professional society as a means of encouraging lifelong learning
- Students will demonstrate good attendance and punctuality practices

GOAL #3 STUDENTS WILL DEMONSTRATE PROBLEM SOLVING AND CRITICAL THINKING SKILLS

- Students will demonstrate the ability to adapt for the trauma patient
- Students will demonstrate the ability to evaluate radiographic images

GOAL #4 STUDENTS WILL DEMONSTRATE EFFECTIVE COMMUNICATION SKILLS

- Students will communicate effectively in the healthcare community
- Students will demonstrate the ability to convey their ideas using speech, graphics and writing

NOTE REGARDING THE 3-YEAR PROGRAM

The 3-year program provides the same educational experiences and requirements as the 2-year Medical Radiography program. The 3-year program demands a lower credit requirement each semester which may be more suited to some students.

Medical Radiography—A.S. Degree			
First Semester		**Medical Radiography Courses**	**Credits**
	BIO 127	Anatomy and Physiology I	4
	MAT 119	College Algebra (may substitute MAT 123)	3
	MRT 111	Radiographic Positioning I	3
	MRT 117	Radiologic Procedures I	1
	MRT 121	Principles of Radiographic Exposure I	2
	MRT 131	Medical Terminology	1
	MRT151	Introduction to Health Care	2
	MRT 161	Clinical Education I	5
Second Semester		**Medical Radiography Courses**	**Credits**
	BIO 128	Anatomy and Physiology II	4
	ENG 101	College Composition	3
	MRT 112	Radiographic Positioning II	3
	MRT 118	Radiologic Procedures II	1
	MRT 119	Imaging Modalities	1
	MRT 122	Principles of Radiographic Exposure II	2
	MRT 162	Clinical Education II	5
	MRT 164	Advanced Clinical Education II (optional)	1
	Res. Elective	Any PHI or PSY (100 level or higher)	3
First Summer		**8-Week Clinical**	**Credits**
	MRT 163	Clinical Education III	5
Third Semester		**Medical Radiography Courses**	**Credits**
	BIO 272	Radiation Biology	2
	MRT 211	Radiographic Positioning III	1
	MRT 251	Advanced Health Care	1
	MRT 255	Pathology	1
	MRT 267	Clinical Education IV	7
	SPE 101	Oral Communications	3
Fourth Semester		**Medical Radiography Courses**	**Credits**
	MRT 212	Radiographic Positioning IV	1
	MRT 222	Principles of Imaging Physics	1
	MRT 230	Radiography Review & Career Planning (optional)	1
	MRT 270	Clinical Education V	7
	MRT 264	Advanced Clinical Education V (optional)	1
	PHY 235	Radiologic Physics	3
	Res. Elective	Any SOC or PSY (100 level or higher)	3
		TOTAL A.S. DEGREE CREDITS	**78-81**

Medical Radiography—A.S. Degree (3-Year)			
First Semester		**General Education Courses**	**Credits**
	BIO 127	Anatomy and Physiology I	4
	ENG 101	College Composition	3
	MAT 119	College Algebra (may substitute MAT 123)	3
	MRT 101	Basic Concepts of Radiography	1
	Restricted Elec.	Any SOC or PSY (100 level or higher)	3
Second Semester		**General Education Courses**	**Credits**
	BIO 128	Anatomy and Physiology II	4
	MRT 131	Medical Terminology	1
	Restricted Elec.	Any PHI or PSY (100 level or higher)	3
	SPE 101	Oral Communications	3
	PHY108	*Survey of Applied Physics* **Required if no high school physics course*	
Third Semester		**Medical Radiography Courses**	**Credits**
	MRT 111	Radiographic Positioning I	3
	MRT 117	Radiologic Procedures I	1
	MRT 121	Principles of Radiographic Exposure I	2
	MRT 151	Introduction to Health Care	2
	MRT 161	Clinical Education I	5
Fourth Semester		**Medical Radiography Courses**	**Credits**
	MRT 112	Radiographic Positioning II	3
	MRT 118	Radiologic Procedures II	1
	MRT 119	Imaging Modalities	1
	MRT 122	Principles of Radiographic Exposure II	2
	MRT 162	Clinical Education II	5
	MRT 164	Advanced Clinical Education II (optional)	1
First Summer		**8-Week Clinical**	**Credits**
	MRT 163	Clinical Education III	5
Fifth Semester		**Medical Radiography Courses**	**Credits**
	BIO 272	Radiation Biology	2
	MRT 211	Radiographic Positioning III	1
	MRT 251	Advanced Health Care	1
	MRT 255	Pathology	1
	MRT 267	Clinical Education IV (*alternate clinical course)*	7
Sixth Semester		**Medical Radiography Courses**	**Credits**
	MRT 212	Radiographic Positioning IV	1
	MRT 222	Principles of Imaging Physics	1
	MRT 230	Radiography Review & Career Planning (optional)	1
	MRT 270	Clinical Education V	7
	MRT 264	Advanced Clinical Education V (optional)	*1*
	PHY 235	Radiologic Physics	3
		TOTAL A.S. DEGREE CREDITS	**79-85**

Medical Radiography – Advanced Certificate:
The purpose of the Medical Radiography Advanced Placement Certificate is to prepare candidates who are currently not qualified to take the American Registry of Radiologic Technologists (ARRT) examination. The ARRT defines three types of candidates eligible for this program:

- Completed a professional educational program that isn't accredited by an agency ARRT recognizes (Students who have completed part of a program that ***is*** accredited by an ARRT-recognized mechanism, should apply as a transfer student as opposed to an advanced placement student).
- Became ineligible for certification and registration as a result of three unsuccessful examination attempts within three years.
- Became ineligible for certification and registration because your exam eligibility time expired (Individuals who graduated from an educational program on or after January 1, 2013, have three years to establish eligibility for ARRT certification and registration; Individuals who graduated on or before Dec. 31, 2012, have five years).

For more information, visit: https://www.arrt.org/about-the-profession/arrt-certification-and-registration/requirements/education/advanced-placement

Individual courses may be taken on a case-by-case basis if a candidate wishes to review a certain registry section in depth prior to taking the test, or has failed the ARRT examination less than three times and wants to review certain areas to obtain the remediation hours needed prior to sitting for the exam again. Individual courses will also be taken if the student fails to meet the benchmarks of each course in the curriculum.

Program Learning Outcomes:
Upon completion of this program, the graduate should be qualified to:
1. demonstrate clinical competence;
2. demonstrate effective patient care; and
3. pass the registry examination.

Medical Radiography – Advanced Placement Certificate			
		Required Curriculum	**Credits**
	MRT 290	Patient Care	1
	MRT 291	Radiation Safety	1
	MRT 292	Image Production	2
	MRT 293	Procedures	2
	MRT294	Clinical Education I	10
	MRT295	Clinical Education II	5
TOTAL ADVANCED PLACEMENT CERTIFICATE CREDITS			**16-21**

Nursing

Credential:

Associate in Science Degree (70 credit hours)

Academic Requirements for Admission:

- High school level Algebra I and Lab Biology;
- College level *College Composition, *Anatomy and Physiology I with Lab and *NRG 101 (Math for Nurses) – a course specific to EMCC's Nursing program; and
- Acceptable scores on the Kaplan pre-entrance exam.

**These requirements are waived for high school seniors seeking admission to the 3-year extended-track Nursing program.*

Individuals who feel they have transferrable credit for any of the college-level prerequisites listed above should confirm course transferability with the Director of Admissions prior to submitting an application for admission to the Nursing program.

Candidates who have completed application requirements and have met all program prerequisites will be invited to attend an information session with faculty. Attendance at a session is required prior to receiving a decision.

Program Overview:

The Nursing program prepares students to become registered nurses at the associate degree level. Upon completion of the program, graduates will obtain an Associate in Science Degree and are eligible to take the NCLEX Registered Nurse (RN) licensure examination and apply for Maine licensure as a registered nurse.

Students are required to provide their own transportation to and from the various clinical agencies. A schedule of classes and clinical rotations is provided at the beginning of each semester. Clinical rotations may involve evening, daytime, and weekends based on availability of clinical sites and instructors.

In order to progress and graduate from the Nursing program, students must maintain passing grades in clinical coursework, concurrent with maintaining at least a C (75) exam average and course grade in all required nursing theory courses. Further guidelines are provided in the ***Nursing Student Handbook***.

The Nursing program is approved by:
Maine State Board of Nursing
161 Capitol St.
158 State House Station
Augusta, Maine, 04333-0158
Phone: 207-287-1133
Fax: 207-287-1149
www.maine.gov/ boardofnursing.

The program is accredited by:
Accreditation Commission for Education in Nursing, Inc. (ACEN)
3343 Peach Tree Rd NE, Suite 850
Atlanta, GA 30326
Phone: 404-975-5000
Fax: 404-975-5020
www.acenursing.org

The ACEN accreditation is from 2012-2020.

The Maine State Board of Nursing may consider refusing to grant a license on the basis of criminal history record information relating to convictions as described in Title 5, Chapter 5301, Subsection 2 of the Maine Revised Statutes, Annotated.

Key Learning Objectives:

Graduates of the Associate in Science Degree program in Nursing will be able to:

- **Evidence-based Practice** - Demonstrate evidence-based clinical decision-making using the nursing process.
- **Person Centered Care** - Acknowledge the person or designee as a partner and source of control in providing care based on values, preferences, culture and needs of the person, family, and community.
- **Teamwork and Collaboration** - Collaborate with respect, truth, and fairness as an effective member of the healthcare team**.**
- **Quality Improvement** - Participate in continuous quality improvement processes.
- **Safety** - Provide safe nursing care through individual performance and participation in system safety processes.
- **Informatics** - Use information and technology to communicate, manage knowledge, reduce errors, and support decision-making.
- **Professionalism -** Participate actively in professional growth and development.
- **Caring** - Provide compassionate care through the use of therapeutic communication, respect, comfort, and attentiveness.
- **Communication** – Effectively communicates, fostering mutual respect and shared decision making to enhance health outcomes.
- **Leadership** – Demonstrates leadership in the professional practice setting through accountability, influence, change management and collaboration with others in a way that facilitates the establishment and achievement of shared goals.

Nursing—A.S. Degree			
Prerequisite Courses			
	BIO 127	Anatomy and Physiology I	4
	ENG 101	College Composition	3
	NRG 101	Math for Nurses	3
First Semester		**Nursing Course**	**Credits**
	NUR 105	Foundations of Nursing	8
		General Education Courses	**Credit**
	BIO 128	Anatomy and Physiology II	4
	BIO 251	Clinical Pharmacology	4
	PSY 101	Introduction to Psychology	3
Second Semester		**Nursing Course**	**Credits**
	NUR 136	Nursing Across the Life Span I	10
		General Education Courses	**Credits**
	PSY 231	Developmental Psychology	3
	BIO 222	Pathophysiology	3
Third Semester		**Nursing Courses**	**Credits**
	NUR 267	Nursing Across the Life Span II	8
	NUR 281	Professional Issues I	1
		General Education Courses	**Credits**
	BIO 216	General Microbiology	4
	SPE 101	Oral Communications	3
Fourth Semester		**Nursing Courses**	**Credits**
	NUR 270	Nursing Across the Life Span III	8
	NUR 282	Professional Issues II	1
		TOTAL A.S. DEGREE CREDITS	**70**

Outdoor Recreation and Tourism

Program Suspended for 2018-2019 Academic Year

Credential:

Associate in Applied Science (62 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

Let nature be your classroom! The outdoors is filled with career opportunities for the student seeking an active outdoor lifestyle and career. With a heavy emphasis on field-based learning, the EMCC Outdoor Recreation and Tourism program prepares students for entry-level positions in adventure travel, environmental education, outdoor leadership, wilderness therapy, guiding and wilderness park operations.

The Associate in Applied Science Degree in Outdoor Recreation and Tourism program, based in Maine's Katahdin Region, will give students the skills, proficiency, and knowledge needed for successful guiding and outfitting of outdoor excursions and park operations as well as a mastery of principles in management and customer service. The EMCC curriculum emphasizes:

- **Backcountry Travel.** Students will gain proficiency at both summer and winter human-powered travel and camping in the challenging environment of northern New England. Sample topics include backpacking, Leave No Trace skills, flat and whitewater canoeing and kayaking, shelter, navigation, use of fire and camp stoves, rock climbing, winter mountaineering, weather forecasting, leadership development and expedition leadership.
- **Environmental Education / Wilderness Ethics.** Now more than ever we need outdoor professionals who understand the importance of natural areas. Explore a variety of ecosystems

including coastal; forests; streams, rivers and lakes; and above tree line and delve into the environmental philosophy.

- **Management, Marketing and Customer Service**. Taking people outdoors is the fun part. Attention to business matters is needed to make that happen. Courses emphasize practical skills such as designing brochures, drafting press releases, using social media and solving real-life customer service dilemmas.
- **Backcountry Risk Management** is woven into nearly every class and specifically includes courses in wilderness medicine, search and rescue, equipment repair and avalanche awareness.
- **Winter Outdoor Recreation** with a focus on human-powered activities such as Nordic skiing, camping, snowshoeing, ice climbing and winter mountaineering. Students also learn about snowmobile operations.
- **Park Operations.** Ideal preparation for entry positions includes trail and shelter construction, chain saw operations, campsite operations, mechanical tool use and park planning needs.

The flexible nature of the program allows for students to also pursue areas of interest outside of the standard curriculum through a growing list of electives and independent study. A variety of professional industry certifications are also obtainable through the program including:

- Wilderness First Responder
- AIARE Level 1 Avalanche
- PCIA Climbing Wall Instructor
- PCIA Single Pitch Climbing Instructor
- Registered Maine Guide – may elect Recreation level or hunting, fishing if personal skills *
- Registered Maine Guide – Hunting and/or Fishing if personal skills *
- Maine Ground Search Team Member
- MFS Chain Saw Operator
- L-180 Human Factors in Wildland Fire Service
- S-130 Firefighter Training
- S-190 Introduction to Wildland Fire Behavior
- Leave No Trace

  * requires additional examination from outside agencies to complete.

Outdoor Recreation and Tourism—A.A.S. Degree			
First Semester		**Technology Courses**	**Credits**
	ORT 105	Introduction to Outdoor Skills	3
	ORT 141	Wilderness First Responder	4
	Restricted Elective	Specialized Outdoor Pursuits (ORT 151-159)	2
	Restricted Elective	Lifestyle Endeavors (ORT 161-169)	1
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	Any Math (100 level or higher)	3
Second Semester		**Technology Courses**	**Credits**
	ORT 106	Introduction to Winter Outdoor Skills	3
	ORT 112	Outdoor Leadership and Guiding	3
	Res. Elective	Specialized Outdoor Pursuits (ORT 151-159)	2
	Res. Elective	Lifestyle Endeavors (ORT 161-169)	1
		General Education Courses	**Credits**
	PHI III	Wilderness Ethics	3
	SCI 201	Field Natural History	4
Third Semester		**Technology Courses**	**Credits**
	ORT 201	Outdoor Program Management	3
	ORT 211	Principles of Search and Rescue	2
	ORT 221	Recreational Maine Guide Preparation	1
	ORT 231	Planning and Design of Park and Natural Area Infrastructure	3
	ORT 233	Planning and Design Field Skills	2
	ORT 241	Use of Mechanized Tools in Outdoor Rec.	1
		General Education Course	**Credits**
	SPE 101	Oral Communications	3
Fourth Semester		**Technology Courses**	**Credits**
	BCA 115	Introduction to Computer Applications	3
	ORT 202	Customer Service and Marketing in Outdoor Recreation	3
	ORT 222	Field Internship in Outdoor Recreation	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	Any Humanities or Social Science (100+level)	3
		TOTAL A.A.S. DEGREE CREDITS	**62**

The Outdoor Recreation and Tourism program is offered at Katahdin Area Higher Education Center located in East Millinocket, Maine

Plumbing Technology

Credentials:

Certificate (30 credit hours)

Academic Requirement for Admission:

High School Level Algebra I required.

Program Overview:

The Plumbing program is designed to provide students with a basic understanding of the tools and materials used by plumbing professionals to complete residential and light-commercial plumbing projects. Students will have opportunities to become proficient in the design, installation, maintenance and repair of standard plumbing systems in accordance with the Maine State Plumbing Code.

Graduates of the program are eligible to sit for the State of Maine Journeyman's Plumbing Examination. The journeyman-in-training license is issued to graduates who successfully complete the exam. With this credential, the graduate is allowed to work under the supervision of a journeyman or master plumber. Upon accumulating 2,000 hours under a journeyman or master plumber, the license is upgraded to that of journeyman. Graduates will have the opportunity to seek employment as service technicians, installers, draftspersons, warehouse workers, and salespersons.

Plumbing - Certificate			
First Semester		**Plumbing Courses**	**Credits**
	PLG 101	Plumbing Technology I	6
	PLG 111	Plumbing Laboratory I	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**Plumbing Courses**	**Credits**
	PLG 102	Plumbing Technology II	6
	PLG 112	Plumbing II Lab	3
		General Education Courses	**Credits**
	DTG 101	Plumbing Print Reading	2
	GEN 130	Employability Skills	1
	PSY 211	Human Relations	3
		TOTAL CERTIFICATE CREDITS	**30**

Refrigeration, Air Conditioning and Heating Technology

Credentials:

Associate in Applied Science Degree (64 credit hours)
Refrigeration Certificate (34 credit hours)

Academic Requirements for Admission:

A.A.S. Degree: High School Level Algebra I required. Algebra II, Geometry, and either Physics or Chemistry with Lab desired.
Certificate: High School Level Algebra I required.

Program Overview:

The Refrigeration, Air Conditioning and Heating Technology program provides students with opportunities to become proficient in the installation, maintenance, and repair of commercial refrigeration, air conditioning, and heating equipment. Special emphasis is placed on trouble-shooting and problem solving. Energy efficiency and green concepts are reinforced throughout the curriculum. Graduates of this program find employment in a variety of commercial and industrial settings, with refrigeration, air conditioning, and heating contractors, and in sales positions. These licenses or certifications are available to graduates of the program: Limited Electrician in Refrigeration License, EPA Refrigerant Certification, Oil Burner Journeyman License, and Propane/Natural Gas License.

Graduates will be certified in the following:

- EPA Refrigerant Certification “Universal Technician” category
- CETP gas certification that leads to a State of Maine Gas Technician License

Graduates are eligible for other State of Maine Licensing:

- Full educational requirements and partial field experience for the Journeyman Oil Burner license
- Partial educational requirements and partial field experience for the Limited Electrician - Refrigeration license

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree will be prepared to:

- apply the fundamentals related to the installation of refrigeration, air conditioning and heating equipment;
- follow State and National codes involving refrigeration, air conditioning and heating equipment;
- safely work with tools and test instruments to service refrigeration, air conditioning and heating equipment;
- demonstrate the skills to troubleshoot refrigeration, air conditioning and heating equipment; and
- apply the skills for pipe fitting techniques related to soldering, brazing, and pipe threading.

Refrigeration, Air Conditioning and Heating—A.A.S. Degree			
First Semester		**Technology Courses**	**Credits**
	RAH 103	Refrigeration and Air Conditioning Lab I	2
	RAH 113	Refrigeration Components and Physical Principles	2.5
	RAH 123	Refrigeration Systems and Flow Controls	2.5
	RAH 133	RAH Electricity I	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**Technology Courses**	**Credits**
	RAH 104	Refrigeration and Air Conditioning Lab II	2
	RAH 138	RAH Electricity II and Motors	3
	RAH 144	Commercial Refrigeration Systems I	2.5
	RAH 147	Commercial Refrigeration Systems II	2.5
	RAH 171	HVAC Print Reading	2
		General Education Courses	**Credits**
	MAT 114	Technical Mathematics II	3
	SPE 101	Oral Communications	3
Third Semester		**Technology Courses**	**Credits**
	RAH 203	Refrigeration and Air Conditioning Lab III	2
	RAH 234	RAH Controls I	3
	RAH 264	Heat Pump Systems	2
	RAH 272	Gas Heating Systems	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	PHY 108	Survey of Applied Physics	4
Fourth Semester		**Technology Courses**	**Credits**
	RAH 204	Refrigeration and Air Conditioning Lab IV	2
	RAH 237	RAH Controls II and Transformers	3
	RAH 283	HVAC Systems I	2.5
	RAH 287	HVAC Systems II	2.5
		General Education Course	**Credits**
	PSY 211	Human Relations	3
		TOTAL A.A.S. DEGREE CREDITS	**64**

^ELO Capstone

Refrigeration, Air Conditioning and Heating—Certificate			
First Semester		**Technology Courses**	**Credits**
	RAH 103	Refrigeration and Air Conditioning Lab I	2
	RAH 113	Refrigeration Components and Physical Principles	2.5
	RAH 123	Refrigeration Systems and Flow Controls	2.5
	RAH 133	RAH Electricity I	3
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	MAT 113	Technical Mathematics I	3
Second Semester		**Technology Courses**	**Credits**
	RAH 104	Refrigeration and Air Conditioning Lab II	2
	RAH 138	RAH Electricity II and Motors	3
	RAH 144	Commercial Refrigeration Systems I	2.5
	RAH 147	Commercial Refrigeration Systems II	2.5
	RAH 171	HVAC Print Reading	2
		General Education Courses	**Credits**
	MAT 114	Technical Mathematics II	3
	SPE 101	Oral Communications	3
		TOTAL CERTIFICATE CREDITS	**34**

Restaurant and Food Service Management

Credential:

Associate in Applied Science Degree (61-62 credit hours)

Academic Requirement for Admission:

High School Level Algebra I

Program Overview:

The Restaurant and Food Service Management program is designed for students who want to get their basic kitchen training and focus more on the business side of things to manage or own their own foodservice operation. Furthermore, students in the Food Service Specialist Certificate program might choose this specialty area to attain their Associate in Applied Science Degree with a second year of study. Finally, students with an Associate in Applied Science Degree in Culinary Arts, or significant transfer credit, often pursue this degree as well in order to make themselves more marketable.

Graduates will have the opportunity to become certified in the areas of ServSafe Sanitation through the Educational Foundation of the National Restaurant Association and Food and Beverage Management through the Educational Institute of the American Hotel and Lodging Association Educational Institute.

Key Learning Objectives:

Graduates with an Associate in Applied Science Degree will be able to perform at mid-level and supervisory positions in the areas of restaurant management. A Classical French foundation will guide graduates through their practical hands-on kitchen training which includes American Regional Cuisine in their first year. The second year of the program focuses on business classes to round out the training. Graduates will:

- create professional quality food;
- make use of management techniques, industry math, and sanitation;
- construct menus and recipes;

- demonstrate employability skills;
- analyze food with regard to nutrition and dietary concerns; and
- utilize technology to analyze business problems and construct appropriate solutions.

Restaurant and Food Service Management — A.A.S. Degree			
First Semester		**Culinary Arts Courses**	**Credits**
	CUL 112	Culinary Skills Development	3
	CUL 124	Culinary Arts I	6
	CUL 131	Culinary Sanitation and Theory	3
		General Education Course	**Credits**
	ENG 101	College Composition	3
Second Semester		**Culinary Arts Courses**	**Credits**
	CUL 125	Culinary Arts II	6
	CUL 141	Food Service Management	3
		General Education Courses	**Credits**
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
	SPE 101	Oral Communications	3
Third Semester		**Business Management Courses**	**Credits**
	BUA 101	Introduction to Business	3
	BUA 111	Accounting I	3
	BUA 141	Principles of Small Business Management	3
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
Fourth Semester		**Business Management Courses**	**Credits**
	BUA 131	Business Law I	3
	BUA 263	Sales and Customer Relations	3
	BUA 271	Marketing Principles	3
		General Education Courses	**Credits**
	NUT 221	Nutrition	4
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
		TOTAL A.A.S. DEGREE CREDITS	**61-62**

^ELO Capstone

Surgical Technology

Credential:

Associate in Applied Science Degree (65 credit hours)

Academic Requirements for Admission:

High School Level Algebra I and either Biology with Lab or Chemistry with Lab required.

Program Overview:

In this program, the student will develop the knowledge, skills and attitudes necessary to practice as a certified surgical technologist by acquiring the following fundamental capabilities:

- to utilize appropriate medical terminology,
- to apply a basic understanding of human physiology and surgical anatomy in the perioperative role of a surgical technologist,
- to demonstrate a basic understanding of the concepts of pharmacology,
- to demonstrate theoretical and practical proficiency in surgical aseptic technique, surgical procedures and patient care,
- to identify and assume appropriate responsibility for patient care.

Prior to completing the program, students will take the National boards for the Certification in Surgical Technology. The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of Surgical Technology and Surgical Assisting (ARC-STSA).

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree in Surgical Technology will function at an entry-level position as a Surgical Technologist with the following skills:

- Use appropriate instrumentation and procedural steps in general surgery, obstetrics/gynecology, genitourinary, otolaryngology, eye, plastic and reconstructive, neurosurgery, vascular, cardiovascular-thoracic, and orthopedic surgical areas.
- Apply a basic understanding of human physiology and surgical anatomy in the perioperative role of a surgical technologist.
- Use appropriate aseptic techniques in surgery.
- Utilize appropriate medical terminology.
- Make basic measurements for dosage and drug calculations.
- Use safe handling procedures for drugs and solutions.

Surgical Technology—A.A.S. Degree			
First Semester		**General Education Courses**	**Credits**
	BIO 127	Anatomy and Physiology I	4
	ENG 101	College Composition	3
	PSY 101	Introduction to Psychology	3
	Restricted Elective	Any Communications (100 level or higher)	3
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
Second Semester		**Surgical Technology Courses**	**Credits**
	MRT 131	Medical Terminology	1
	SUR 105	Introduction to Surgical Technology	7
	SUR 117	Pharmacology for Surgical Technologists	2
		General Education Courses	**Credits**
	BIO 128	Anatomy and Physiology II	4
Third Semester		**Surgical Technology Course**	**Credits**
	SUR 114	Surgical Technology I	15
		General Education Course	**Credits**
	BIO 216	General Microbiology	4
Fourth Semester		**Surgical Technology Course**	**Credits**
	SUR 123	Surgical Technology II	16
		TOTAL A.A.S DEGREE CREDITS	**65**

Trade and Technical Occupations

Credential:

Associate in Applied Science Degree (60 credit hours)

Academic Requirements for Admission:

High School Level Algebra I required. Geometry and Physics desired.

Program Overview:

Trade and Technical Occupations recognizes proficiency acquired through various trades and technical occupations in which individuals have completed or are in the process of completing a formal registered apprenticeship program (i.e., journeyman status). The apprenticeship program must be a minimum of three years in length and must be registered by either the Maine State Apprenticeship Council or the Bureau of Apprenticeship Training, U.S. Department of Labor; or be a formal program approved by the College. Students who have completed or are currently enrolled in a registered apprenticeship program may apply for admission into the Trade and Technical Occupations program. The degree is awarded after students have completed all requirements of the apprenticeship program. Applicants are responsible for providing all required documentation.

Trade and Technical Occupations-A.A.S. Degree			
		Technology Courses	**Credits**
	TTO 112 TTO 118 TTO 124	Apprenticeship I ***or*** Apprenticeship II ***or*** Apprenticeship III	12 18 24
		Selected Coursework (100 level or higher)	15-27
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	Any Communications (100 level or higher)	3
	Restricted Electives	Any Humanities or Social Sciences (100 level or higher)	6
	Restricted Electives	Mathematics or Science (100 level or higher)	9
		TOTAL A.A.S. DEGREE CREDITS	**60**

Welding Technology

Credentials:

Associate in Applied Science Degree (63-64 credit hours)
Certificate (31-32 credit hours)

Academic Requirements for Admission:

A.A.S. Degree: Admission to the associate in applied science degree Welding Technology program is determined upon successful completion of the certificate in Pipe Welding program.
Certificate: High School Level Algebra I required.

Important:

Be advised that EMCC has space available each fall for 24 first-year Pipe Welding certificate students and only 14 second-year Welding Technology Associate in Applied Science degree students. All students who are offered admission are initially placed in the one-year Pipe Welding Certificate program. Upon completion of their first semester in technology courses, students are then offered the opportunity to apply for second-year slots in the Associate degree program. (Grade point average and successful progression in all courses including the general education courses required for welding are used in awarding the second-year slots). Placement test scores may extend program length upon entry. For further clarification, please contact the Admissions Office.

Program Overview:

The Welding Technology program offers students a modular based curriculum in one- or two-year format including technical courses in structural and pipe welding, pipe fitting and blueprint reading and drafting. The Pipe Welding Certificate offers training in basic and pipe welding techniques utilizing the shielded metal arc welding process. Second-year students enroll in advanced welding and receive training in GMAW, GTAW, and pipe fabrication.

All the welding program options are combined with a variety of general education courses and technology theory courses.

Significant emphasis is placed on math, communication, physical science, and social science courses. Special courses in the welding metallurgy and quality assurance/quality control are also required within the technology. This mix of theory courses, general education courses, and skill training places our graduates in high demand.

There are a number of scholarships awarded to our students in Welding Technology. The Reginald Roy Scholarship was offered for the first time for the 2000-2001 academic year. This scholarship encourages students to maximize skill potential and career opportunities.

Key Learning Objectives:

Graduates with the Associate in Applied Science Degree in Welding Technology function at an entry-level position for welders in the following areas:

- AWS D1.1 SMAW Structural Certification
- ASME Section IX SMAW Pipe Certification
- ASME Section IX GTAW Pipe Certification
- Demonstrate safe, competent use of Oxy-Fuel Cutting Equipment

The Welding Technology program is an American Welding Society (AWS) Designated Educational Institutional Member. The Welding program is certified as a S.E.N.S.E. program (Schools Excelling through National Skills Education) and Educational member through American Welding Society, 8669 NW 36 Street, Ste. #130, Miami, FL 33166-6672; 1-305-4439353; 1-800-443-9353; www.aws.org.

Welding Technology—A.A.S. Degree			
First Semester		**Welding Technology Courses**	**Credits**
	WEL 111	Metal Technology	3
	WEL 131	Shielded Metal Arc Welding (SMAW), Basic	2
	WEL 132	Shielded Metal Arc Welding, Advanced I	2
	WEL 134	Shielded Metal Arc Welding, Structural	2
	WEL 151	Flux-Cored Arc Welding (FCAW)	2
	WEL 186	Blueprint Reading and Drafting for Welders	3
		General Education Course	**Credits**
	MAT 113	Technical Mathematics I	3
Second Semester		**Welding Technology Courses**	**Credits**
	WEL 133	Shielded Metal Arc Welding, Advanced II	2
	WEL 135	Shielded Metal Arc Welding, Pipe I	2
	WEL 136	Shielded Metal Arc Welding, Pipe II	2
	WEL 137	Shielded Metal Arc Welding, Pipe III (ASME Qualification)	2
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
Third Semester		**Welding Technology Courses**	**Credits**
	FIT 231	Pipefitting Fundamentals	2
	FIT 233	Practical Pipefitting I	1.5
	FIT 235	Practical Pipefitting II	1.5
	WEL 265	Gas Metal Arc Welding (GMAW), Basic	1
	WEL 267	Gas Metal Arc Welding, Advanced	1
	WEL 269	GMAW, Pipe	1
		General Education Courses	**Credits**
	ENG 215	Business and Technical Writing^	3
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
	Restricted Elective	Any Communications, Humanities, Mathematics, Social Science, or Science	3
Fourth Semester		**Welding Technology Courses**	**Credits**
	WEL 222	Quality Assurance/Quality Control	4
	WEL 270	GTAW, Basic	2
	WEL 277	Gas Tungsten Arc Welding, Pipe I	2
	WEL 278	Gas Tungsten Arc Welding, Pipe II	2
	WEL 279	Gas Tungsten Arc Welding, Pipe III	2
		General Education Course	**Credits**
	Restricted Elective	Any Humanities or Social Science (100 level or higher)	3
		TOTAL A.A.S. DEGREE CREDITS	**63-64**

Welding Technology—Certificate in Pipe Welding			
First Semester		**Welding Technology Courses**	**Credits**
	WEL 111	Metal Technology	3
	WEL 131	Shielded Metal Arc Welding (SMAW), Basic	2
	WEL 132	Shielded Metal Arc Welding, Advanced I	2
	WEL 134	Shielded Metal Arc Welding, Structural	2
	WEL 151	Flux-Cored Arc Welding (FCAW)	2
	WEL 186	Blueprint Reading and Drafting for Welders	3
		General Education Course	**Credits**
	MAT 113	Technical Mathematics I	3
Second Semester		**Welding Technology Courses**	**Credits**
	WEL 133	Shielded Metal Arc Welding, Advanced II	2
	WEL 135	Shielded Metal Arc Welding, Pipe I	2
	WEL 136	Shielded Metal Arc Welding, Pipe II	2
	WEL 137	Shielded Metal Arc Welding, Pipe III (ASME Qualification)	2
		General Education Courses	**Credits**
	ENG 101	College Composition	3
	Restricted Elective	Any Math or Science (100 level or higher)	3-4
		TOTAL CERTIFICATE CREDITS	**31-32**

EXPLANATION OF COURSE DESCRIPTIONS

The following are descriptions of courses offered by the College to meet curricula requirements. Descriptions are general in nature and are not intended to include all topics which may be part of the course and, in some cases, items in the descriptions may be omitted from the course. Revisions are sometimes necessary to meet changes in course or program objectives.

Academic Prefix Course Number Number of Credits

Course Title	**BUA 112 Accounting II** **3 Credits**
Course Description	Continues the principles and procedures initiated in **BUA 111 Accounting I,** and includes current and long-term liabilities, corporations, inventory methods, depreciation, payroll accounting, and plant assets. (3 lec)
Prerequisite(s)	**Prerequisite: BUA 111 with grade of C or higher**

Explanation of Course Description Codes*:* The distributions contained in this Catalog are based on a "typical" 15-week semester. A number of technical programs have 5-week modules. Consult the current schedule for individual course meeting times. The College reserves the right to modify these and all other elements of a course at its discretion.

Explanation of lec, lab hours:

- **Lecture Hours (lec)** - the number of hours per week a particular course meets in an instructor-directed classroom situation.
- **Lab Hours (lab)** – the number of hours per week a particular course meets and where students are in a practical, occupational or applied learning situation. Also, can be the number of hours per week a particular course meets in a student and equipment laboratory situation. Field work and small group discussions may also be included in these hours.
- **Hours (hr)** – the number of training hours in a technical shop per module.
- **Clinical or Field Experience or Practicum Hours – Credit Hours** – the number of credit hours awarded to the student who successfully completes a course.

Definition of Units of Credit*:* Eastern Maine Community College curricula designs are based on the following (Maine Community College System Academic Affairs Policy No. 304) definition of a Unit of Credit:

> "(1) one semester credit hour for each fifteen hours of classroom contact plus thirty hours of outside preparation or the equivalent; or (2) one semester credit hour for each thirty hours of laboratory work plus necessary outside preparation or its equivalent, normally expected to be fifteen hours; one semester credit hour for not fewer than forty-five hours of shop instruction (contact hours) or the equivalent..."

Prerequisite(s): Any course work that must be completed **before** the student is eligible to register for a course.

Corequisite(s): Any course which must be taken during the same semester.

These abbreviations are used in the course descriptions that follow.

ART	Art	GEO	Geography
ASL	American Sign Language	GIS	Geographic Information Systems
ATA	Automotive	HIS	History
ATH	Diesel, Truck and Heavy Equipment	HTM	Hospitality and Tourism Management
ATT	Automotive and Diesel Technologies	HUM	Humanities
BCA	Business Computer Applications	HUS	Human Services
BCT	Building Construction Technology	ISA	Industrial Safety
BIO	Biology	KOR	Korean Language
BMT	Business Management Technology	LAE	Introductory English
BUA	Business Management	LAM	Introductory Mathematics
CAD	Computer Aided Drafting and Design	MAS	Medical Assistant
CAS	Career Studies	MAT	Mathematics
CET	Civil Engineering	MATL	Mathematics Laboratory
CHE	Chemistry	MRT	Medical Radiography Technology
CRJ	Criminal Justice	MUS	Music
CST	Computer Systems Technology	NRG	Nursing
CUL	Culinary Arts	NUR	Nursing
DGD	Digital Graphic Design	NUT	Nutrition
DTG	Drafting	ORT	Outdoor Recreation & Tourism
ECE	Early Childhood Education	PHI	Philosophy
ECO	Economics	PLG	Plumbing
EDB	Education	PHY	Physics
ELC	Electricians Technology	PSY	Psychology
EMS	Emergency Medical Services	RAH	Refrigeration Air Conditioning & Heating
ENG	English	SOC	Sociology
ENGL	English Laboratory	SPE	Speech
EPT	Electrical and Automation	SUR	Surgical Technology
FAR	Fine Arts	TTO	Trade and Technical Occupations
FIR	Fire Science Technology	WEL	Welding
FIT	Pipefitting		
FWC	Fine Woodworking & Cabinet Making Technology		
FYE	College Success Course		

COURSE DESCRIPTIONS

ART 100 Drawing I **3 Credits**
Introduces basic art theory as it relates to representational drawing. Emphasis is placed on composition, materials manipulation, problem solving skills and critically analyzing one's own artwork as well as other students' work. (6 lab)

ART 101 Introduction to Digital Photography **3 Credits**
This course provides an overview of composing and processing digital images. It introduces various photographic techniques and standards involving the use of current technology digital cameras. Also covered is History of Photography through studying individual photographers and their work. (This is the same as DGD 101 and can only be taken once for credit). (2 lec, 2 lab)

ART 112 2-D Design **3 Credits**
A foundation course in two-dimensional design. Students will examine the elements and principles of two-dimensional design using hands on examples and exercises. Students will use both conventional media (paper, pencils, ink, glue, etc.) and digital media (computer graphics programs, such as Adobe Illustrator) to complete the exercises. Emphasis is placed on composition, materials manipulation, problem-solving skills, critiques and class participation. (2 lec, 2 lab)

ART 125 3-Dimensional Design **3 Credits**
Three-Dimensional Design is an introduction to both sculpture and applied design. This course covers current materials and methods used to create three-dimensional forms. Abstract three-dimensional concepts as they relate to the creative process will also be studied. Students will be expected to fabricate, evaluate and verbally discuss assignments and examples of these concepts, as well as understand the principles of organizing form and space and the processes and concepts of three-dimensional design. Assignments will also involve practical considerations of structure, materials, and craftsmanship. This course is taught through hands-on projects, lectures, critiques and class discussions. Trips to local museums and galleries augment class work. (2 lec, 2 lab)

ART 130 Fine Art Photography **3 Credits**
This course is designed as an elective class that helps promote the use of photography as an art form. Students are encouraged to explore non-traditional uses of a camera and promote original thinking through the use of imagery. Using digital photography in a black and white form, students will capture images based on their own personal preference. Extensive experimentation is encouraged as students define their process for creating their images. Weekly lectures and discussions allow the students to talk about their work, provide encouragement as well as valuable feedback to how to use the camera as an artistic tool, and promote the evolution and progression of their photographs as art. At the end of the course all students will participate in an art show with their peers. Concentration on expressive and aesthetic aspects of photography in fine arts. Emphasis on ability to manipulate and compose with light as a crucial element in the organization of space. (2 lec, 2 lab) Prerequisite: DGD101 or ART101

ART 232 Commercial Photography **3 Credits**
In this course students learn to create professional quality images for the advertising, commercial and industrial markets. Through a series of lectures as well as hands-on experience, students will come away with an understanding of the concepts of studio lighting and location lighting setups, as well as how to properly photograph people, still life, products and food in those environments. The course emphasizes the use of photography integrated with design to create effective graphics**.** (2 lec, 2 lab) Prerequisite: DGD101 or ART101

ART 291 Topics in Fine Art **3 Credits**
Focuses on a different topic in art each time it is offered and may be taken more than once for credit. Topics will be determined by the department.

ASL 101 Introduction to American Sign Language I **3 Credits**
Introduces students to the language most widely used in the adult American Deaf Community. It also introduces students to Deaf Culture, exploring issues of relevance and import in the Deaf Community such as cochlear implants, interpreted education and empowerment. Although technical, using videotexts, workbooks, pair practice, lecture, readings and deaf guests, students experience an eye-opening, energizing and skills building course. (3 lec)

ASL 102 American Sign Language II **3 Credits**
This course builds upon the foundations of the language learned in ASL 101. Whereas ASL 101 had a focus of receptive skills (understanding the signs of others), this course focuses on the student's expressive skills (one's ability to produce the signs) in a grammatically correct fashion, perfecting the formation of the five parameters of placement, location, palm orientation, movement and facial expression. The second half of the textbook is used, completing all lessons the American Sign Language Teacher's Association (ASLTA) deemed required for basic sign language skills. Extensive interaction is required amongst classmates. In class presentations will be required. An out of class research project is required. (3 lec) Prerequisite**: ASL 101**

ATA 100 Automotive Safety and Light Vehicle Repair **4 Credits**
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. (2 lec, 4 lab)

ATA 110 Automotive Basic Electrical Systems **3 Credits**
The first of two electrical courses, this course will introduce the fundamentals of electricity. Students will study voltage, amperage, resistance, wattage and Ohm's Law, and their relationship to electrical circuits of an automobile. Students will study the fundamentals and make up 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 utilize a wiring diagram to trace an electrical circuit. **Corequisite: ATA 100 or instructor permission**

ATA 120 Automotive Shop Management 2 Credits
This course covers the fundamentals of operation of an automotive fleet or automotive dealer service facility. Topics covered in this class include: customer service and public relations; scheduling appointments and working with the customers at the time of the appointment; the three C's of a repair order; complaint, cause and correction, warranty claims and Maine's Lemon Law.

ATA 124 Automotive State Inspection Prep 1 Credit
This 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.

ATA 125 Automotive Steering and Suspension I 2 Credits
The first of two courses, this course will focus on the steering and suspension systems of modern vehicles. This course will introduce students to identify steering and suspension components and inspect them for wear. Additionally, students will inspect steering and suspension systems to determine necessary corrective actions. This course will provide instruction to identify parts as satisfactory, marginal, or flagged for replacement. Included will be the study of wheels and tires, wheel balance, and road force. Students will inspect and identify worn steering and suspension components while utilizing available vehicle data and service information. **Prerequisite: ATA 100**

ATA 126 Automotive Steering and Suspension II 2 Credits
The second of two courses, this course will focus on the steering and suspension systems of modern vehicles. This course will provide students with experience to analyze problems and replace worn parts. Students will apply critical judgment to determine effective diagnostic procedures based on instruction, available vehicle data and service information. Included will be the study of front and rear wheel alignment diagnosis, adjustment and repair. **Prerequisite: Successful completion of ATA 125 with grade of C or higher**

ATA 145 Automotive Brake Systems I 2 Credits
This course will introduce students to the fundamentals of the automotive braking system. The first of two courses, students the will learn the theory 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

maintenance procedures on drum brake and disc brake systems. Additionally, Students will inspect the power booster and identify the components of the anti-lock brake (ABS) traction control, and the regenerative braking system and determine necessary action. **Prerequisite: ATA 100**

ATA 146 Automotive Brake Systems II **2 Credits**
This course will introduce students to the operation, diagnosis and repair of automotive braking systems. The second of two courses, students the will learn the theory of operation of hydraulic, mechanical, vacuum, and electronic systems of automobile brakes. Students will diagnose and repair or replace hydraulic components and brake lines. Additionally, students will inspect and diagnose poor stopping, wheel lock up, abnormal pedal feel and determine necessary corrective action, with and without electronic brake control systems. Students will diagnose electronic brake control systems through the retrieval of diagnostic trouble codes and / or using recommended test equipment. **Prerequisites: ATA 145 with grade of C or higher; ATA110**

ATA 150 Automotive Engine Repair **3 Credits**
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 principles and their applications on modern automotive engines. Students will learn to apply appropriate diagnostic techniques to identify failed areas within the engine and determine 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: ATA 100**

ATA 190 Automotive Program Internship **3 Credits**
The Program Internship is an on-the-job training opportunity, providing the student with work experience(s) in an area of Automotive Technology of specific interest to the student and mutual benefit to the employer. 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 objectives necessary to satisfy the requirements for student evaluation. It is suggested that the employer provide as many experiences outlined in the 2012 NATEF standards as possible under the direction of an assigned mentor. (320 hours) **Prerequisite: Instructor permission**

ATA 210 Advanced Automotive Electrical Systems **3 Credits**
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 study the diagnosis of starting and charging systems, improper operation of chassis and body electrical and electronic systems and determine necessary corrective actions. **Prerequisite: Satisfactory completion of ATA 110 with grade of C or higher or instructor permission**

ATA 215 Manual Transmissions and Driveline 3 Credits
This course will cover manual drive train and axles theory, diagnosis and repair. Students will learn to remove and reinstall transmissions/transaxles. Students will inspect and repair manual transmission systems, inspect and reinstall power train components, and perform clutch diagnosis and repair. Students will apply critical thinking skills, utilizing service information, to diagnose problems with transaxles, clutches, and drive shafts to determine necessary corrective action. **Prerequisite: ATA 100; Corequisite: ATA 210**

ATA 220 Engine Performance and Diagnosis 3 Credits
The first of a two course sequence addressing automotive engine performance, this course will introduce the theory, operation and repair of Ignition systems and fuel system as they pertain to automobiles and light duty trucks. Students will perform compression tests, cylinder leakage tests; and vacuum tests to identify failed areas of the engine and required service procedures. The students will learn to utilize proper diagnostic procedures and determine appropriate corrective procedures to repair, replace, or install components of the ignition and fuel systems that cause poor engine performance. **Prerequisites: ATA 110 and ATA 150 with grade of C or higher**

ATA 225 Automotive Heating and Air Conditioning 3 Credits
This course is an examination of automotive heating, ventilation, and air conditioning 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 corrective action. **Prerequisites: ATA 210 with grade of C or higher**

ATA 230 Drivability and Emission Controls 3 Credits
The second of two courses, this course is a comprehensive overview of automotive computerized engine controls 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 study emission controls, their purpose on OBDII engines and their effect on engine performance when they are not operating properly. Students will inspect and test computerized engine control system sensors, powertrain/engine control module (PCM/ECM), actuators, and circuits utilizing scan tools, graphing multimeters, (GMM)/ and digital storage oscilloscopes (DSO). **Prerequisites: ATA 210 and ATA 220 with grade of C or higher**

ATA 235 Automatic Transmissions and Transaxles 3 Credits
This course will cover automatic transmission theory, diagnosis, and repair. Students will perform full in-vehicle 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 transmission, inspect for failed parts and rebuild transmission to operating condition**. Prerequisites: Completion of ATA 210 and ATA 215 with grade of C or higher**

ATH 101 Shop Orientation and Safety I: Heavy Equipment/Truck I **1 Credit**
Familiarizes students with shop safety, regulations, liabilities and legalities as they pertain to the truck and heavy equipment industry and identifies proper use of hazardous materials, shop equipment practices and procedures, and correct operation of trucks and heavy equipment in shop areas. (20 hr.)

ATH 103 Minor Repairs: Heavy Equipment/Truck **2 Credits**
Teaches the theory, function, and diagnosis of truck and heavy equipment performance for maintenance service and light duty repairs to cooling, lubricating, electrical and exhaust systems. It addresses the safety procedures that need to be followed when arc or gas welding in the automotive industry. (60 hr.) **Prerequisite: ATH 101**

ATH 113 Heavy Equipment/Truck Braking Systems **3 Credits**
Introduces the theory, operation, service, and repairs of hydraulic brakes, vacuum boosters, air brakes, and all related components including electrical and emphasizes the importance and use of asbestos removal equipment when servicing braking systems. The course also offers preparation for CDL air brake testing. (80 hr.) **Prerequisite: ATH 101 or instructor permission**

ATH 121 Heavy Equipment/Truck Drive Trains **4 Credits**
Presents the theory and operation of the complete drive train. Familiarizes students with tools and techniques necessary to properly maintain, diagnose, service, and repair automatic transmissions, manual transmissions, torque converters, final drives, front-wheel drives, and all related components. (120 hr.) **Prerequisite: ATH 101 or instructor permission**

ATH 131 Diesel Engines (Heavy, Gas) **4 Credits**
Introduces the theory and operation of the two and four-cycle internal combustion engine and the construction and designs of diesel and gas engines; addresses the advantages and disadvantages of both, as well as the evaluation and testing procedures used to determine engine condition, and measure engines and their components. It identifies the skills and tools needed to test, remove and recondition engines and components, including electrical, while emphasizing correct techniques and safety procedures. (120 hr.) **Prerequisite: ATH 101 or instructor permission**

ATH 133 Diesel Engine Diagnosis and Tune-up (Heavy, Gas) **3 Credits**
Provides the knowledge and skills required to troubleshoot and tune engines with mechanical and electrical components in a safe and professional manner, and teaches the proper use of diagnostic equipment and the correct techniques needed to make adjustments. (80 hr.) **Prerequisite: ATH 101 or instructor permission**

ATH 141 Diesel Fuel Systems **3 Credits**
Provides the theory and operations of carburetors, gas and diesel fuel injection systems, related components, including electrical/electronics, and fuel qualities. Teaches the skills and tools needed to diagnose and service fuel systems and to perform on-vehicle fuel injection adjustments. (100 hr.) **Prerequisite: ATH 101 or instructor permission**

ATH 151 Hydraulic Systems **3 Credits**
Teaches the theory, principles, terminology, and schematics of hydraulics. Students learn the components of hydraulic systems, as well as their applications. Students also learn how to trouble-shoot/test both manual and electrical controls, and perform preventive maintenance and repair of hydraulic pumps, motors, valve bodies, accumulators, lines and actuators in a safe and professional manner. (100 hr.) **Prerequisite: ATH 101 or instructor permission**

ATH 163 Heavy Equipment/Truck Steering and Suspension Systems **3 Credits**
Instructs the theory and operation of steering and suspension systems; safety precautions to be followed when servicing steering and suspension systems; and proper tools, equipment and procedures for servicing and alignment. (80 hr.) **Prerequisite: ATH 101 or instructor permission**

ATH 175 Motor Vehicle Inspection **2 Credits**
Teaches State of Maine Motor Vehicle Inspection Laws and the proper procedures to test and inspect trucks, trailers and automobiles. (60 hr.) **Prerequisite: ATH 101 or instructor permission**

ATH 211 Shop Management: Heavy Equipment/Truck **2 Credits**
Addresses the fundamentals of operating a fleet or dealer service facility. The course covers public relations, customer service, work and PM scheduling, repair orders, warranty claims, hiring and training practices, shop organization, tools and equipment, and the importance of coordinating with other departments. (60 hr.) **Prerequisite: 600 hours of ATH or instructor permission**

ATH 273 Exhaust Aftertreatment System/Alternate Fuels **1 Credit**
Teaches theory, function and terminology of Exhaust Aftertreatment and applications. Defines creation of noxious gases in engines exhaust. Operation, maintenance of catalytic convertors, diesel particulate filters and selective catalytic reduction systems. Purpose of and application using Alternative Fuels, construction and operating differences of engines that use these fuels. (31 hr.)
Prerequisite: ATH 101 or instructor permission

ATT 133 Basic Electrical Systems **3 Credits**
Provides students with the theory of electricity, Ohm's Law, and the skills needed to correctly use volt meters, amp meters, and millimeters. Students troubleshoot and diagnose electrical systems in a safe and systematic approach. (60 hr.) **Prerequisite: ATA 101 or ATH 101 or instructor permission**

ATT 135 Advanced Electrical Systems **2 Credits**
Develops skills necessary for the use of advanced electrical and electronic testing equipment in testing and diagnosing electrical and electronic control systems on modern automobiles, trucks and heavy equipment. (60 hr.) **Prerequisite: ATH 101, ATT 133 or instructor permission**

ATT 141 Heating and Air Conditioning **3 Credits**
Familiarizes students with the operation, safety procedures, diagnosis and service of automotive heating and air conditioning systems. The course includes recovery and reuse of R12 and 134A refrigerants and EPQ regulations. (80 hr.) **Prerequisite: ATT 135 or ATH 101 or instructor permission**

ATT 251 Automotive Basic Machine Shop Principles **2 Credits**
Introductory course pertaining to basic machine shop principles and practices. Students will work with metric imperial units in using micrometers, vernier and electronic calipers, and precision layout tools. Students will also use conventional engine lathes, vertical milling machines, drilling machines, and a planer type reciprocating surface grinder. Other topics will include practical metallurgy, metal classification, oxy-acetylene operations, and bench work practices. (60 hr.)

BCA 101 Document Processing/Formatting **2 Credits**
Develops skills in document formatting, including speed, accuracy, and professional standards. Students will gain expertise in keyboarding, document formatting, and essential word processing skills using Microsoft Word 2016. Emphasis will be placed on basic office correspondence including letters, memorandums, tables, and reports. (15 lec, 15 lab)

BCA 115 Introduction to Computer Applications **3 Credits**
Develops basic computer skills with emphasis on formatting business documents using Microsoft Word, Excel, Access, and PowerPoint.

BCA 116 Database Management **3 Credits**
Continues BCA115 to develop skills and build proficiency in database management using Microsoft Access. This course is designed to develop mastery skills in various database processing functions. Students will become proficient in creating a database; managing data; and creating queries, forms, and reports using enhancements and manipulating data. **Prerequisite: BCA 115**

BCA 202 Integrated Software Applications **3 Credits**
Information Processing Capstone Course: Uses integrated software applications for report, document, presentation, and information development activities. Advanced concepts and techniques using Microsoft Word, Excel, Access, and PowerPoint to produce professional proposals, financial reports, data forms, and presentations will be featured. Exercises will stress the importance of file and data management. Students will be expected to produce these documents in a “hands-on” lab environment as well as independent work outside the classroom. **Prerequisite: BCA 115**

BCT 151 Residential Construction I **7 Credits**
Emphasizes methods and materials used in residential construction and covers building codes, floor framing systems, wall framing, types and layout of trusses, cornice systems, types of roof coverings, exterior doors, windows, siding, and exterior paint. Students apply their coursework through the construction of a residential building. 15-week course (3 lec, 14 lab)

BCT 152 Residential Construction II **7 Credits**
Presents methods and materials used to finish interiors of buildings, including gypsum board, tile ceilings, suspended ceilings, wall paneling, paint, hardwood flooring, tile floors, wall-to-wall carpeting, interior doors and trim. Students apply the skills by completing the interior of a residential project. 15-week course (3 lec, 14 lab) **Prerequisite: BCT 151 or instructor permission**

BCT 213 Stair Construction **1 Credit**
Concentrates on the construction of basic and finish stairways. Students study stairway types, calculations, layout, materials and construction methods. Students apply these concepts by constructing a set of finish stairs complete with newel posts, balusters, and handrail. 4-week course (2 lec, 12 lab) **Prerequisite: BCT 151 or instructor permission**

BCT 255 Commercial and Industrial Construction **4 Credits**
Engages students in the fundamentals of building layout, elevation control and concrete work. Applies field practice with transits for building layout, control points, and establishing building elevations. Students also practice designing and testing concrete mixtures, form design and construction, reinforcement location, placement, finishing and curing concrete. 11-week course (2 lec, 12 lab) **Prerequisite: BCT 151 or instructor permission**

BCT 264 Estimating **3 Credits**
Provides students with a background in construction documents and estimating materials and labor, including construction contracts, insurance, specifications, material take-off, and material and labor estimates. 15-week course (3 lec, 0 lab) **Prerequisites: BCT 152, DTG 124 and MAT 113 or instructor permission**

BCT 272 Cabinetmaking and Millwork **5 Credits**
Teaches kitchen cabinet layout, parts of cabinets, types of doors and drawers, hardware, and different cabinet joints used in construction of cabinets. Students construct and install cabinets, including countertops. 15-week course (2 lec, 12 lab) **Prerequisite: BCT 151**

BCT 266 Construction Management and Estimating II **3 Credits**
A continuation of Estimating. Emphasis on tracking project budget and schedule. Students also study construction contract documents, insurance requirements, tax liabilities and supervisory management. 15- week course (3 lec, 0 lab) **Prerequisite: BCT 264 or instructor permission**

BIO 100 Concepts in Biology **4 Credits**
Introduces students to basic biology principles such as: molecular and cellular biology, genetics, biological diversity and ecology. The goal of this course is to increase student knowledge of the world surrounding them and give them a basis for making informed decisions and options on biological issues. Special emphasis will be placed on relating topics to current events. (The course would not be transferable as a prerequisite for advanced biological science at another institution, only as a general education course.) (3 lec, 2 lab)

BIO 105 Human Genetics **3 Credits**

Human Genetics is a basic introduction to mammalian genetics using humans and mice as model organisms due to their similar genetic pathways and disorders. BIO 105 introduces you to basic genetics vocabulary and principles of inheritance, with the goal of enriching your understanding of genetics. Students will also be provided with the background needed to navigate through the ever-increasing genetic information appearing in the media. (3 lec)

BIO 109 Principles of Biology I **4 Credits**

Principles of Biology I **i**ntroduces the basic principles of molecular and cellular biology, genetics, evolution, biological diversity, and ecology. This course is the first of a two semester sequence of college biology designed to prepare the student for study at a four-year institution in the fields of biology, medicine, agronomy, animal husbandry, or wildlife biology. The laboratory component of the course stresses laboratory safety and procedures and offers hands-on experiments designed to reinforce course topics. (3 lec, 2 lab) **Prerequisites: High School Biology and Algebra I, or equivalent**

BIO 127 Anatomy and Physiology I **4 Credits**

Offers an integrated approach to anatomy and physiology, beginning with the chemical basis of life, and including cells, tissues, the integumentary, skeletal, muscular, and nervous systems. Laboratory experiments reinforce and augment concepts covered in lecture. (3 lec, 2 lab) **Prerequisite: High School Biology or permission**

BIO 128 Anatomy and Physiology II **4 Credits**

Continues BIO127 covering the endocrine, cardiovascular, respiratory, lymphatic, immune, digestive, urinary, and reproductive systems. Emphasis is placed on relating structure to function. Laboratory experiments reinforce and augment concepts covered in lecture. (3 lec, 2 lab) **Prerequisite: BIO127**

BIO 209 Principles of Biology II **4 Credits**

Introduces functions (physiology) and structures (anatomy, morphology) of animals and plants stressing basic physiological processes and adaptations to the environment. Equal attention is given to plants and animals. This course is the second of a two semester sequence of college biology designed to prepare the student for study at a four-year institution in the fields of biology, medicine, agronomy, animal husbandry, or wildlife biology. The laboratory component of the course stresses laboratory safety and procedures and offers hands-on experiments designed to reinforce course topics. (3 lec, 2 lab) **Prerequisite: BIO 109 with grade of C or higher or equivalent**

BIO 216 General Microbiology **4 Credits**

An integrated lecture-laboratory course concentrating on agents associated with human disease including bacteria, viruses, fungi and protozoa. Microbial control, epidemiology and immunology are also studied. Laboratory sessions focus on aseptic technique, slide preparations, bacterial culturing and identification of organisms. (2 lec, 4 lab) **Prerequisites: BIO128 with grade of C or higher <u>or</u> BIO 109 and BIO 209 with grade of C or higher <u>or</u> instructor permission**

BIO 222 Pathophysiology **3 Credits**

Focuses on understanding fundamental disease processes beginning with general concepts of disease and altered cell functioning. Also included are topics on inflammation, infection, neoplastic and fluid, electrolyte and acid-base imbalances. These concepts are applied to the study of disease processes using a systems-oriented approach. (3 lec) **Prerequisites: BIO 122 and BIO 126 with grade of C or higher or BIO 209 with a grade of C or higher**

BIO 251 Clinical Pharmacology **4 Credits**

Discusses the essential concepts of clinical pharmacology and their application to safe medication administration in medical practice. Drug actions, therapeutic uses, and key adverse effects of major drug categories are examined. Knowledge of the essential concepts of clinical pharmacology and their application to medical practice is the foundation for this course. This course is designed to enhance the students' ability to provide care and educate patients; it builds upon their understanding of anatomy, physiology, pathophysiology, and the medical process. The major drug categories are discussed with an emphasis on their actions, therapeutic use, interactions, and key adverse effects. Medical responsibilities and accountability related to safe medication administration across the life span are emphasized. (4 lec, 0 lab) **Prerequisites: BIO128 with grade of C or higher in each (Note: Students matriculated into the Nursing Program may take BIO128 as Corequisites with BIO 251)**

BIO 272 Radiation Biology **2 Credits**

Reviews the interaction of radiation within living systems, and radiation effects on molecules, cells, tissues and the body as a whole. Factors affecting biological response are presented, including somatic and genetic effects of radiation exposure. Radiation protection principles are presented including federal and state health and safety requirements; radiation safe practices for patients, personnel and the public; dose limits and personnel monitoring. (2 lec) **Prerequisite: BIO128 with grade of C or higher**

BMT 113 Medical Terminology I **3 Credits**

Introduces the basic structure of medical language. Students will become familiar with prefixes, suffixes, root words, and combining forms pertaining to the chemical basis of life, as well as the integumentary, musculoskeletal, nervous, sensory, endocrine, blood, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Topics will include word structure and function, word building, as well as diagnostic, procedural, laboratory, pathological, surgical, and pharmacological terms. Additional concepts covered will include pronunciation, spelling, and pluralization of medical terms.

BMT 114 Medical Terminology II **3 Credits**

Continues BMT113 and includes a more in-depth encounter with medical terminology covering the body as a whole including the integumentary, musculoskeletal, digestive, blood, cardiovascular, respiratory, nervous, urinary, reproductive, endocrine, lymphatic, and immune systems. Students will practice analyzing and deconstructing medical terms to define the meaning as well as construct medical terms using prefixes, suffixes, word roots, and combining forms. Topics will include pronunciation, spelling, writing, and pluralizing of common medical terms. **Prerequisite: BMT 113 with grade of C or higher**

BMT 121 Medical Law and Ethics **3 Credits**
Covers the study and application of medicolegal concepts and ethics in the medical profession. Understanding professional conduct and confidentiality will be emphasized. Principles of medical ethics and current issues will be discussed. The basic legal relationship between the healthcare provider and the patient will be covered. (3 lec)

BMT 133 Introduction to Medical Coding **3 Credits**
Develops a basic understanding of diagnostic coding using ICD-10-CM and procedural coding using ICD-10-PCS and CPT. Students will assign codes to patient encounters in both the inpatient and outpatient settings. (3 lec)

BMT 204 Medical Office Procedures **4 Credits**
Medical Office Technology Capstone Class: Emphasizes essential skills required of the administrative medical assistant. The students will gain practical knowledge of appointment booking, office protocol, time management, telephone techniques, office equipment, mail services, references, medical filing and records management, correspondence, and travel and meeting arrangements. To prepare students for the ever-increasing use of technology in the medical office, this course places continued importance on the computerization of routine tasks and of communications. This course allows for the integrated application of office procedures, skills, and knowledge in the classroom through the use of projects and simulations. Students are introduced to practice management software designed to simplify and streamline the way medical practices function. Particular emphasis is placed on the electronic medical record. Students learn to perform the duties of the administrative medical assistant under realistic conditions and with realistic pressures that require them to organize their work and set priorities. **Prerequisites: BCA 115, BMT 206; Pre <u>or</u> Corequisite: BMT 233 or instructor permission**

BMT 206 Medical Billing & Reimbursement Methodologies **3 Credits**
Utilizes computer applications to cover the flow of information in a medical office. Students will develop skills to initiate and input patient data using a computerized medical office program. This will include scheduling appointments, recording patient information, filing insurance claims, and managing accounts receivable. In addition, students will be able to process insurance claim forms adhering to legal restrictions. Topics will include requirements for managed care systems, Blue Cross/Blue Shield, Medicaid, Medicare, Workers Compensation, Disability, and third-party insurance. **Prerequisite: BCA 115, BMT 133**

BMT 207 Electronic Medical Record **1 Credit**
Develops a basic understanding of electronic medical record (EMR) software application. Emphasis will be placed on hands-on application of a software program designed to interface with practice management systems in physician practices. Using an electronic medical record software helps make the administration of a practice easier and more cost-effective**. Pre <u>or</u> Corequisites: BCA 115, BMT 113**

BMT 213 Medical Terminology III **3 Credits**
Continues **BMT 114, Medical Terminology II.** Units of study include pharmacology, oncology, radiology, surgery and mental illness. (3 lec) **Prerequisite: BMT 114 with grade of C or higher**

BMT 221 Medical Transcription I **3 Credits**
Introduces the healthcare record and medical documents. Transcription of basic medical dictation incorporating the English usage and machine transcription skills, medical knowledge, and proofreading and editing skills will be covered. Students must meet progressively demanding accuracy and productivity standards. **Prerequisites: BCA 115, BMT 114, BUA 105 or instructor permission**

BMT 222 Medical Transcription II **3 Credits**
Continues BMT221. Students must transcribe advanced, original medical dictation, using advanced proofreading and editing skills, while meeting progressively demanding accuracy and productivity standards. **Prerequisite: BMT 221**

BMT 232 ICD-10-CM Diagnostic Coding **3 Credits**
Develops a comprehensive understanding of diagnostic coding using ICD-10-CM. The focus will be on data analysis for billing and reimbursement. (3 lec) **Prerequisites**: **BMT 113, BMT 133, BIO 121 or instructor permission**

BMT 233 CPT Procedural Coding **3 Credits**
Continues concepts learned in BMT232 ICD-10-CM Diagnostic Coding. Develops a comprehensive understanding of procedural coding using CPT/HCPCS coding systems. This course emphasizes practice in the assignment of valid diagnostic and procedure codes in an ambulatory care setting. Covers procedural terminology in current use, evaluation and management [E/M] codes, medicine, HCPCS Levels II and III, and CPT Category II and III codes. (3 lec) **Prerequisite: BMT 232**

BMT 234 ICD-10-PCS Coding **3 Credits**
Develops a comprehensive understanding of procedural coding using ICD-10-PCS. The focus will be on data analysis for billing and reimbursement in the inpatient setting. (3 lec) **Prerequisite: BMT 232 or instructor permission**

BMT 235 Certified Outpatient Coding Exam Prep **1 Credit**
Prepares students through practice to demonstrate proficiency in assigning accurate medical codes for diagnoses, procedures, and services performed in the outpatient setting. (1 lec) **Prerequisites: BMT 232, BMT 234**

BMT 236 Certified Professional Coder Exam Prep **1 Credit**
Prepares students through practice to demonstrate proficiency in assigning accurate medical codes for diagnoses, procedures, and services performed in the physician office setting. (1 lec) **Prerequisites: BMT 232, BMT 233**

BMT 252 Pharmacology for the Medical Office **3 Credits**
Develops an understanding of the concepts surrounding pharmacology, such as the pharmacokinetics and pharmacodynamics of drugs, and the concepts of pharmacotherapy. Includes medical terminology, drug category, use, side effects, contraindications, and interactions. Common dosage ranges and routes of administration will also be examined. The medications will be discussed according to major drug classifications and body systems. Students will gain a general understanding of the actions and reasons for use of various groups of pharmacologic agents in the healthcare setting, both inpatient and outpatient. (3 lec) **Prerequisites: BMT 113, BIO 100 level or higher**

BMT 261 Health Unit Coordinator **3 Credits**
Prepares the student to perform the duties of a basic health care secretary. Content includes communications, basic terminology, transcription of physician orders, clerical functions, scheduling of personnel, supply and repair procurement. Clinical experience included. **Prerequisite: BMT 113 Medical Malpractice Liability Insurance required; purchase when registering for class.**

BMT 281 Medical Office Externship **3 Credits**
Offers students opportunities for supervised work experiences in a medical office setting. This course combines classroom theory with on-the-job training. Must complete 240 hours of training to receive credit for this course. (0 lec, 1-3 lab) **Prerequisite: Instructor permission only.**

BUA 101 Introduction to Business **3 Credits**
This course examines the role of business in American society; the interrelated activities through which business provides the goods and services essential to contemporary society; and the interrelationships between business and government, labor, and society at large. General areas of study center on the foundation of business, management of the enterprise, marketing activities, finance and financial services, and contemporary business problems and development. Topics include economic systems, forms of business ownership, small business and entrepreneurship, management theory, human relations, marketing, accounting, finance, stock market and regulatory factors. (3 lec)

BUA 103 Business Plan Development **3 Credits**
Requires the development and presentation of a “real-world” business plan that may actually be implemented. Topics include planning, the development and screening of business ideas, preparation of a feasibility analysis, industry analysis, market analysis, the marketing plan, the management team, company structure, the operations plan, and financial projections. Students are required to make a formal presentation of their plan at the end of the course. This course serves as the capstone course for the Small Business Development Certificate. (3 lecture, 0 lab)

BUA 105 Business Communications **3 Credits**
In this course students will strengthen their proofreading and editing skills needed for managing the accuracy and quality of document production. Students will develop language arts skills including grammar, spelling, and punctuation. This course also covers

various types of business reports and communications with emphasis on preparation, collection of data, organization, style, and format. Emphasis is placed on appropriate formats for business communication including grammatical style, clarity, and conciseness of message. (3 lec)

BUA 111 Accounting I **3 Credits**
Covers the fundamental principles and procedures of accounting including the voucher system and bank reconciliations, with emphasis on developing the technical procedures of the accounting cycle including journalizing, posting, adjusting entries, closing procedures, and preparing financial statements. (3 lec) **Prerequisite: AR≥75 or LAM 008 with a grade of C or higher**

BUA 112 Accounting II **3 Credits**
Continues the principles and procedures initiated in **BUA 111 Accounting I,** and includes current and long-term liabilities, corporations, inventory methods, depreciation, payroll accounting, and plant assets. (3 lec) **Prerequisite: BUA 111 with grade of C or higher**

BUA 131 Business Law I **3 Credits**
Presents the nature of contracts including offer and acceptance, consideration, voidable contracts, unenforceable contracts, performance of contracts, rights of third parties, discharge of contracts and remedies for breach, and includes a section dealing with judicial procedure, torts, and administrative law. (3 lec) **Prerequisite: WP Accuplacer score ≥ 5**

BUA 132 Business Law II **3 Credits**
Surveys the creation of agencies, the employment relationship, laws and related areas of partnerships; the laws and management of corporations; and the rights of stockholders. Property laws are also introduced. (3 lec) **Prerequisite: WP Accuplacer score ≥ 5 or completed BUA 131**

BUA 141 Principles of Small Business Management **3 Credits**
Presents the fundamentals of small business management primarily to non-business majors, and includes such topics as business ownership, organization and management, marketing, personnel, finance, and legal and regulatory controls. (3 lec)

BUA 165 Business Math **3 Credits**
Develops math skills needed to understand the procedures and policies of business transactions including: bank reconciliation, depreciation systems, simple interest, payroll taxes and procedures, inventory, turnover, and overhead, stocks and bonds, compound interest, and sales, property and income taxes. (3 lec) **Prerequisite: AR Accuplacer score ≥75 or LAM 008 with a grade of C or higher**

BUA 211 Managerial Accounting **3 Credits**
Introduces financial accounting information for managerial planning and cost control. Sample topics include responsible accounting procedures, cost-volume relationships, differential analysis procedures, and capital budgeting. (3 lec, 0 lab) **Prerequisite: BUA 112**

BUA 213 Accounting with QuickBooks **3 Credits**
Introduces QuickBooks software. Content includes setting up companies, entering payables, writing checks, entering sales, processing discounts, tracking sales tax, collecting receivables, preparing journal entries, generating internal reports, and creating financial statements. (3 lec, 0 lab) **Prerequisite: BUA 112**

BUA 221 Business Economics (Double check description with that approved) **3 Credits**
Provide the student with a concisely focused yet rigorous introduction to both micro- and macroeconomic theory needed at the foundational level of an undergraduate business degree program. Some of the topics to be addressed include: market behavior; demand theory and related elasticity concepts; production and cost theory; managerial decision-making in perfectly competitive and imperfectly competitive markets; unemployment and inflation; and fiscal and monetary policy. (3 lec.)

BUA 234 Credit and Finance Management **3 Credits**
Presents the field of credit including legality, the instruments of credit, credit systems, credit and collections, borrowing and investing, investment tools and their use, and financial problem-solving, using the financial analyst calculator. (3 lec) **Prerequisite: BUA 112**

BUA 254 Introduction to Real Estate **4 Credits**
Course covers the fundamental principles and procedures of real estate entry licensure for the State of Maine. Topics include industry overview, agency relationships, product knowledge, financing, valuation, contracts, closings, and miscellaneous Federal and State laws governing real estate. Successful completion of this course (75 or higher) and the student may elect to sit for the State of Maine Real Estate Commission Sales Agent exam.

BUA 260 Social Environment of Business **3 Credits**
Discusses in detail the inter-relationships among business, government and society. Considerable time is spent discussing how these relationships change. The potency of change comes from forces in the business environment and from the actions of business. Through the use of readings, supplemental cases and class discussions, students will gain an understanding of the many significant issues facing the business community today. (3 lec)

BUA 263 Sales and Customer Relations **3 Credits**
Introduces the student to the basics of personal selling and the importance of positive customer relations. Explains the five P's of personal selling - preparation, prospecting, pre-approach, presentation, and post-sale activities. Emphasis will be placed on obtaining repeat sales through positive customer relations. (3 lec)

BUA 265 Leadership **3 Credits**
Designed to provide emerging and existing leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course may integrate readings from leadership cases studies, experiential exercises, contemporary readings on leadership, and the textbook. (3 lec)

BUA 271 Marketing Principles **3 Credits**
Introduces marketing as it relates to the economy and the policies and practices of marketing institutions. Course content includes an overview of marketing, social responsibilities, consumer behavior, organizational markets, market segmentation, product management, price-setting, market channels, promotion, international markets, research, and the marketing of services. (3 lec, 0 lab)

BUA 281 Cooperative Education for Business **3 Credits**
Offers students opportunities for supervised work experiences in business and/or non-profit organizations. This course combines classroom theory with on-the-job training and can be used as elective credit in the second year of study. (1-3 lab) **Prerequisites: GPA 3.0, completion of 15 credits hours in Business Management, completion of 30 credit hours total, and instructor permission.**

BUA 291 Principles of Management and Organization **3 Credits**
Examines the process of management by emphasizing the concepts and techniques of planning, organizing, and controlling functions. Also focuses on contemporary regulatory environment issues for managers. (3 lec)

CAD 101 Introduction to CADD **3 Credits**
Introduces Computer Aided Drafting and Design through a combination of lecture, hands-on exercises, and drawing problems. While this course is designed for students with little previous computer or drafting experience, being familiar with a Windows operating system and basic file management would be beneficial. (2 lec, 2 lab)

CAD 105 CADD I **3 Credits**
Introduces students to the principals of technical drawing employing both traditional drafting and Computer-Aided-Drafting techniques using AutoCAD software. Introduction to the principles of drafting to include terminology and fundamentals, size and shape descriptions, projection methods, geometric construction, sections, and auxiliary views. This class serves as the department's introductory computer-aided drafting & design (CADD) course (2 lec, 2 lab).

CAD 106 CADD II **3 Credits**
Students will build on skills learned in CAD I by striving to be more proficient in the use of AutoCAD. The class teaches students how to use the most efficient command for a task and introduces advanced techniques for drawing, editing, working with advanced customization tools, blocks, working with sheet sets, and creating layouts, drawing complex objects (including polylines, regions, and advanced text objects), and enhancing productivity with simple customization. (2 lec, 2 lab) **Prerequisite: CAD 105 with grade of C or higher**

CAD 128 Residential/Commercial Construction Theory and Design **3 Credits**
Four guidelines are followed with each subject material: design, building procedures, materials, and blueprint reading. The subjects covered will include: foundations, floors, walls/elevations, electrical, plumbing, and roofs for both residential and commercial.

Other areas covered will include heavy timber frame construction, welding and kitchens. (2 lec, 2 lab)

CAD 131 BIM I **3 Credits**
Allows users to design a building, structure and its components in 3D, annotate the model with 2D drafting elements, and access building information from the building model's database. Residential design will be the main focus throughout the class by reinforcing the skills or topics covered in class though a building block approach where each succeeding practice reinforces earlier topics. This class serves as the department's introductory Building Information Modeling course. (2 lec, 2 lab)

CAD 132 Solid Modeling I **3 Credits**
Promotes essential skills by introducing students to the concepts, commands, and techniques of Solidworks. Students will create and document designs by creating parametric sketches, constraints, 3D parametric parts, assemblies and working drawings. (2 lec, 2 lab)

CAD 205 3D Visualization **3 Credits**
Covers 3D techniques and operations using 3ds Max Design software, including solid modeling, lighting techniques, material creation and mapping, photo-realistic rendering, and design integration with other design software packages. (2 lec, 2 lab)

CAD 229 Career Experience Lab **4 Credits**
Provides the student with the employment experience that is typical for the CADD technician in the industry. It is designed to present the understanding of what working in a drafting/design office would entail. Collaborative projects with local firms, government, utilities, or other employers ensure a significant experience. (1 lec, 6 lab) **Prerequisite: CAD 131 with grade of C or higher**

CAD 232 Solid Modeling II **3 Credits**
Builds on skills learned in Solid Modeling I by striving to be more proficient in the use of Solidworks. Advanced topics will include sheet metal design, surfacing, component creation, mold design, weldments, and expansion of the basic concepts and commands. (2 lec, 2 lab) **Prerequisite: CAD 132**

CAD 234 Visualization for Architecture, Engineering and Construction **3 Credits**
Students will use AutoCAD and 3D Studio VIZ to create advanced 3D models. Students will use the software to create still images and animations for visualization of models. Using digital photography, students will combine models with real world images. Additional software will be used when necessary. (2 lec, 2 lab) **Prerequisite: CAD 205 with grade of C or higher**

CAD 242 BIM II **3 Credits**
Building Information Modeling II (BIM II) is a continuation of BIM I. Students will focus on more in-depth commands and practices while learning the basics of commercial design. Advanced topics will include mass modeling, family and material creation and editing,

lighting and rendering, design options, phases, work sharing and design integration. (2 lec, 2 lab) **Prerequisite: CAD 131**

CAS 101 Portfolio Development **1 Credit**

CAS 103 Prior Learning Portfolio Development **3 Credits**

CET 100 Introduction to Civil Engineering **1 Credit**
Provides an introductory study of the civil engineering technology. Topics include introduction to: the Civil Engineering Technology Program, civil engineering technology as a profession, project life cycle, estimating, scheduling, design, contracting, ethics and engineering computations using computer software. (2 lab)

CET 101 Plane Surveying **3 Credits**
Studies surveying instruments and their use in the measurement of angles, distances, and elevations. Also includes mathematics, computational methods, adjustments and measurement analysis used in plane surveying. (2 lec, 2 lab) **Pre- or Corequisite: MAT 119 or MAT 123**

CET 110 Materials **3 Credits**
Studies the structure, properties, and testing of engineering materials and their use in constructed facilities. Includes metals, woods, concrete, bituminous mixtures, plastics, insulation, adhesives and corrosion of materials. Engineering design is introduced by readings and discussions on creativity, the design process and the concepts of marginal economic analysis, probability of failure and safety factors. Design problems include design of concrete mixtures and insulating systems to satisfy specific realistic situations taking into account uncertainty, safety, economic factors and intangibles, as well as technical considerations. (3 lec, 0 lab) **Pre- or Corequisite: MAT 119 or MAT 123**

CET 111 Materials Laboratory **1 Credit**
Evaluates material performance under applied loads for engineering applications. Physical properties of concrete, metals, plastics, and wood. Exercises include study of the variability of materials, construction of probability density functions from test data and computation of the probability of failure (2 lab) **Pre- or Corequisite: CET 110**

CET 121 Civil CADD **3 Credits**
Introduces Computer Aided Drafting and Design through the use of Autodesk Land Desktop and Civil Design. Basic AutoCAD commands are studied such as those used in drawing, editing, viewing, and dimensioning. Other topics include paper space, xrefs, attributes, projects, and project point databases. Instruction includes lecture, hands-on exercises and drawing problems. (2 lec, 2 lab)

CET 124 Construction Estimating **3 Credits**
Introduces the estimating and bidding processes for construction projects. Topics include cost estimating for residential, commercial, highway and industrial construction projects.

Manual, computer assisted and estimating software is utilized to prepare construction cost estimates, bids and project budgets. (3 lec) **Prerequisite: CET110 or instructor permission**

CET 201 Cooperative Education for Civil Engineering Technology 3 Credits
Provides the student with work experience in civil engineering areas such as construction, materials testing, and/or transportation. Following the second semester, students work in a full-time salaried position with participating civil engineering firms. CET faculty assist and maintain contact with the student and employer during the co-op period. At the end of the co-op period, the employer evaluates the student's professional development based on their work assignment. (An abbreviated third semester of CET courses follows the co-op period, running from November 1 to the end of the fall semester.) **Prerequisites: CET 101, CET 110, CET 111, CET 121, and CET 214; or instructor permission**

CET 202 Construction Surveying 3 Credits
Studies surveying procedures in construction. Includes volume computations, stakeout, grade, layout site mapping, profile, and cross-sections. (1 lec, 4 lab) **Pre <u>or</u> Corequisite: CET 101**

CET 211 Statics and Strength of Materials 4 Credits
Considers analytical solutions of force systems. Load, shear, moment and deflection values are solved for in beams, trusses, and frames under static loading. Study of stresses and strains that occur as structural members are subjected to shearing, tensile, compressive and flexural forces. (3 lec, 2 lab) **Prerequisites: CET 110 and MAT 119 <u>or</u> CET 110 and MAT 123**

CET 212 Structural Design 4 Credits
Studies the design of wood beams and columns, steel beams, columns and tension members, and reinforced concrete beams. Covers building code requirements for loads including dead, live, snow, wind and earthquake. (3 lec, 2 lab) Prerequisite**: CET 211**

CET 214 Soils Mechanics 4 Credits
Introduces the physical properties of soil important to the construction industry. Includes standard ASTM tests, classification systems, drainage, frost action, slope stability, and shallow foundations. (3 lec, 2 lab) **Pre- <u>or</u> Corequisite: MAT 119 or MAT 123**

CET 221 3D Civil CADD 3 Credits
The student will be introduced to Computer Aided Drafting and Design through the use of Autodesk Civil 3D. Students will use the program to create detailed civil drafting and mapping documents. Topics to be covered are point and line creation, surface creation, parcels, alignments, profile views and profiles, assemblies and corridors, cross-sections and volumes, cut and fill, and pipe networks. (2 lec, 2 lab) **Prerequisite: CET 121**

CHE 100 Chemistry for Everyday Living 4 Credits
Introduces, non-mathematically, the basic principles of chemistry, with an emphasis on relevance to everyday life. Topics will include alternative energy sources such as nuclear chemistry, air and water pollution, consumer products, plastics, and synthetic fibers.

Laboratory correlates with lecture material. Designed for non-science majors. (3 lec, 2 lab) **Prerequisite: High School Algebra I or equivalent, or Corequisite: LAM 009**

CHE 103 Chemistry for Emergency Responders **3 Credits**
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. (3 lec, 0 lab)

CHE 113 Chemistry I **3 Credits**
Designed for science and pre-professional students, this course is the first part of general chemistry. Problem solving skills are emphasized, and topics include: matter and energy; method of measurement; principles of chemical reactivity; stoichiometry; energy and chemical reactions; periodicity of elements; atomic and molecular structures; chemical bonding; molecular orbital theory; electrolytes; environmental and nuclear chemistry. (3 lec, 0 lab) **Prerequisite: High School Algebra II and High School Chemistry or equivalents. Corequisite: CHE 115**

CHE 114 Chemistry II **3 Credits**
Builds upon the content of Chemistry I. Topics include intermolecular forces, solutions, chemical kinetics and equilibria, acid-base chemistry, thermodynamics electro-chemistry, nuclear chemistry, and environmental chemistry. (3 lec, 0 lab) **Prerequisites: CHE 113 and CHE 115 with grade of C or higher in each. Corequisite: CHE 116**

CHE 115 Chemistry I Laboratory **1 Credit**
Applies concepts appropriate to **CHE 113, Chemistry I,** with emphasis on safety and record keeping, and the acquisition of basic experimental skills, techniques, and concepts in chemistry. Coordinated to the topics discussed in lecture. (0 lec, 2 lab) **Corequisite: CHE 113**

CHE 116 Chemistry II Laboratory **1 Credit**
Applies concepts appropriate to CHE114**.** (0 lec, 1 lab) **Corequisite: CHE 114**

COL 100 College Success **3 Credits**
Designed to provide students with materials, resources and strategies to develop an educational portfolio and individual college success plan to increase their own success in college and in meeting their educational and personal goals. Students will explore college careers and determine how mindset, personal responsibility, self-awareness, persistence, organization and institutional knowledge affect college success and will apply these concepts to their own educational and personal success plans. (3 lec.)

COL 299 Special Topics in College Learning **1 -3 Credits**
Focuses on a different topic in college learning each time it is offered and may be taken more than once for credit.

CRJ 101 Introduction to Criminal Justice **3 Credits**
Exposes students to a survey of core actors and institutions within the field of Criminal Justice. Specifically, the functions and responsibilities of policing, the courts, and corrections will be reviewed to provide a foundational understanding of contemporary law enforcement, jurisprudence, and punishment. The processes which underlie the justice system are reviewed in their proper sequence to trace the movement of a criminal defendant from the commission of a crime through arrest, adjudication, punishment and release. (3 lec, 0 lab) **Prerequisite: Admission to the Criminal Justice Program or instructor permission**

CRJ 113 Criminology **3 Credits**
Introduces the use of criminological theory as a framing device for measurement, classification, and meaningful analysis of crime and criminality. Perspectives including classical, positivist, biological, psychological, social structural, social process, and social conflict are analyzed in turn to reveal the theoretical underpinnings of crime from a myriad of vantage points. These are used to evaluate the ways in which developmental, psychological, and environmental factors may combine to encourage, facilitate, or promote criminality. Additionally, the role of victims is explored to understand the experience of victimization and issues related to it, e.g. precipitation and target hardening. (3 lec, 0 lab) **Prerequisite: CRJ 101 with grade of C or higher**

CRJ 121 Criminal Law **3 Credits**
Provides students with a functional understanding of the ways in which criminal laws act to proscribe conduct that undermines social order in a constitutional democracy. Students will examine the necessary component parts of a crime, i.e., mens rea and actus reus, and the complex interrelationships between those elements. Liability thresholds for criminal acts will be explored as well as the possible exceptions to criminal liability in the form of affirmative defenses**.** (3 lec, 0 lab) **Prerequisite: CRJ 101 with grade of C or higher**

CRJ 131 Police Operations **3 Credits**
Reviews the roles and responsibilities of policing agents in the performance of their varied crime prevention and response duties. It examines specific aspects of daily operation responsibilities such as traffic control, routine patrol, interviewing, report writing, and testifying. Students will gain insight to the reciprocal relationships between patrol and the command structures which oversee them. Additionally, the bases for legal authority and constitutional action are addressed in the context of officer safety and professional liability. (3 lec, 0 lab) **Prerequisite: CRJ 101 with grade of C or higher**

CRJ 201 Ethics for the CJ Practitioner **3 Credits**
Provides an examination of human morality and its utility in for practitioners in the criminal justice system. It addresses the relationship between introspective, critical analysis of self and the use of self-awareness in the development of moral reasoning. Further, students will explore the relationship between personal, social, and professional definitions of ethical conduct. In respect to the latter, the unique demands confronting police, court, and corrections officers are examined in light of profession-specific dilemmas in the field. The necessity of maintaining ethical identity and understanding

the consequences for failure to behave accordingly are underscored. **Prerequisites: CRJ 101 and CRJ 242 with grades of C or higher**

CRJ 205 Criminal Investigations **3 Credits**
Introduces the foundational elements of criminal investigation of violent, property, public order, and other misdemeanor and felony offenses. Students will be exposed to the techniques for approaching, preserving, and collecting evidence and establish a chain of custody in emphasized, especially as relates to the necessity of documenting investigative activity. The role of interviewing and interrogation as investigatory assets is also examined to establish the importance of communication with suspects. **Prerequisites: CRJ 101 and CRJ 131 with grades of C or higher**

CRJ 221 American Corrections **3 Credits**
Reviews and situates the contemporary philosophical and practical applications of corrections against a historical landscape of punishment for unlawful conduct. A survey of current practices in institutional and community corrections will give students an opportunity to understand the roles and responsibilities of probation, parole, and correctional officers as they fulfill the obligations of their professions. Students will also explore the parallel adult and juvenile justice systems to determine points of intersection as well as the gross differences between them in philosophy and practice. **Prerequisite: CRJ 101 with grade of C or higher**

CRJ 226 Criminalistics **3 Credits**
Serves as an introduction to the application of scientific methods to the collection and analysis of evidence for forensic purposes. The roles and responsibilities of evidence collection specialists and forensic scientists are presented to establish their importance in the process of investigation and adjudication of criminal acts. Students will be exposed to the techniques for analyzing various types of physical evidence, latent and otherwise, as well as the need for documenting and testifying to these activities. **Prerequisites: CRJ 101, CRJ 131, and CRJ 205 with grades of C or higher**

CRJ 232 Report Writing and Testifying **3 Credits**
Develops the ability to generate written reports within the justice professions. It focuses on the importance of grammatically and syntactically fluid documentation that translates professional activity into an objective representation of relevant fact patterns. Specifically, students will be exposed to the various types of commonly used reports, memoranda, and other types of documents required in professional law enforcement. The translation of written reports into testimony is also underscored, with a particular emphasis placed on courtroom demands such as etiquette, attire, and preparation for examination and cross-examination. **Prerequisites: CRJ 101 and CRJ 131 with grades of C or higher**

CRJ 242 Criminal Procedure **3 Credits**
Introduces and examines the underpinnings of procedural law and its relationship to the activities of justice practitioners in policing, courts, and correctional settings. It will examine the relationship between procedure and practice for justice professionals, especially as it relates to administrative and judicial dictates that frame constitutional

action. The parameters and guidelines for actions such as arrest, search and seizure, stop and frisk, custodial interrogation conducted by a police officer are examined. The various aspects of pre-trial and trial process are analyzed in respect to procedural expectations concerning issues related to admissibility of evidence, fair and speedy trials, and the basis for appeals. Finally, the rights of prisoners and those in post-sentence custody are evaluated in light of constitutional requirements. **Prerequisite: CRJ 101 with grade of C or higher**

CRJ 252 Serial Murder **3 Credits**

Introduces and explores the phenomenon of repetitive, intrinsically motivated murder utilizing both clinical and law enforcement perspectives. Primary behavioral and crime scene characteristics of both organized and disorganized types of offenders will be reviewed to explain the incidence of serial homicide as a function of motivational factors ranging from psychopathy to severe psychiatric disturbance. The varied typologies and classification systems for serial murderers will be presented as a means of discussing issues ranging from victim selection to law enforcement investigative responsibilities. The course will rely heavily upon a detailed case study format which will scrutinize the crimes of key selected offenders and allow students to apply theoretical knowledge to particular serial perpetrators. (This is the same as PSY 252 and can only be taken once for credit).

CRJ 253 Psychology of Cults **3 Credits**

Introduces and explores the structure and psychology of totalistic cultic organizations. Students will examine the key differences between conventional religious movements, splinter sects and cults to better understand the differences between varied faith-based organizations. Cults will be viewed both from historical and contemporary viewpoints in regard to recruiting practices, thought reform and control, personal and social consequences of cult membership, and the unique challenges that such groups pose for law enforcement. Additionally, students will review the clinical precursors which may predispose an individual to cultic persuasion and indoctrination, as well as the psychological consequences of membership. The course will rely heavily upon a detailed case study format which will scrutinize selected cult leaders/groups and allow students to apply theoretical knowledge to particular historical events and figures. (This is the same as PSY 253 and can only be taken once for credit).

CRJ 254 Criminal Profiling and Behavioral Analysis **3 Credits**

Introduces and reviews the basic theoretical and practical applications of criminal profiling techniques. Specifically, the student will be introduced to concepts including, but not limited to: the uses of criminal profiling; crime scene evaluation and reconstruction; criminal motivation and offender characteristics; modus operandi and offender signature; psychopathic and sadistic behavior; behavioral aspects of fire-setting; serial offenses, including rape and homicide. Students will explore varied offense behaviors and their psychological underpinnings to develop an understanding of the role of behavioral analysis of evidence in critical investigations. (3 lec)

CRJ 255 Forensic Psychology **3 Credits**

Introduces the intersecting points for psychology and the legal system. Students will be exposed to concepts that assist law enforcement and the judicial system in performing

their respective functions. Topics will include but not be limited to risk assessment of violent behavior, competency evaluations, and insanity determinations in the legal arena. Course delivery will emphasize the application of psychological theory and practice to resolve dilemmas and solve problems of a legal nature. (3 lec)

CRJ 260 Student Policy Academy **3 Credits**
Provides students interested in a career in law enforcement with an opportunity to learn under the instruction and supervision of current and retired law enforcement professionals. The course utilizes a simulated academy environment to facilitate theoretical and practical hands-on learning of topics including, but not limited to: leadership and decision making; ethics; use of force; defensive tactics; officer safety; active threat engagement; building searches; crime scene investigation; Maine criminal and traffic law; high risk stops; interview and interrogation techniques; report writing and courtroom testimony; dealing with the mentally ill, and health and fitness (police stress). Successful completion of the SPA will prepare students for the rigorous and competitive process of applying to law enforcement training and employment venues in and outside of Maine. (3 lec) **Prerequisite: Enrollment by faculty nomination only. Students must acknowledge nomination and accept a slot in the SPA in order to be enrolled.**

CRJ 261 Arrest and Control Techniques **3 Credits**
Introduces and reviews the basic law enforcement skills of self-defense and control. Specifically, students will learn and practice the important elements of establishing control of situations using verbal, nonverbal and physical techniques as complementary intervention options. Strategies to manage the initial encounter will be discussed in regard to proper stance, appropriate social distance, authoritative body language and the use of verbal diffusion. The physical elements of encounter will be reviewed and practiced to provide the necessary understanding of other control systems such as proper use of handcuffs, baton and chemical products to establish control. The focus on practical skills will be reviewed within the context of situational use of force options ranging from verbal redirection to deadly force. **Prerequisites: CRJ 101 and CRJ 131**

CRJ 291 Topics in Criminal Justice **3 Credits**
Focuses on a different topic in criminal justice each time it is offered and may be taken more than once for credit. Topics will be determined by the department.

CST 101 Introduction to College Learning **1 Credit**
Provides the student with skills and knowledge necessary for a successful community college experience. Among the topics discussed are: college culture, time management, stress management, study skills, note-taking, test taking, GPA, learning styles, teaching styles, careers, and EMCC structure. (2 weeks: 7.5 lec/discussion per week)

CST 103 Introduction to Computer Systems **3 Credits**
Introduces students to computers, networks, and information fluency. Basic computer and workplace skills are addressed with emphasis on applications of the computer as a medium for representing, storing, manipulating, and communicating different forms of information. The processing and storage of audio, video, text, and various media forms will be studied. An introduction to office applications is included and students will use

various software packages to create documents, spreadsheets, graphs, databases and presentations (2 lec, 2 lab)

CST 123 PC Hardware and Operating Systems **3 Credits**
Covers the functional components of the personal computer (PC) and its common peripherals, and an introduction to the Windows operating system. Hardware topics include the microprocessor, power supplies, bus structure, interrupts, DMA, memory, storage devices, serial and parallel port technologies, video displays, and modems. The laboratory component of this course is geared toward increasing student proficiency in setting up and servicing PC hardware and operating systems through the use of hands-on exercises. Diagnostic tools and troubleshooting techniques are emphasized throughout. This course leads to the taking of the CompTIA A+ certification exam. (2 lec, 2 lab)

CST 124 An Introduction to Linux **3 Credits**
Provides students with a comprehensive overview of the Linux operating system in a personal computer environment. Topics include Linux shells and shell commands, the structure of the Linux file system, text editors, managing files and directories, file system administration, command input and output redirection and piping, shell scripting, and process management. (8 weeks, 6 lec, 1.5 lab)

CST 143 Web Applications and Development **3 Credits**
A practical hands-on introduction to the design and development of a Web site, this course introduces students with little or no experience in Web scripting to the concepts, syntax, and structure of xhtml. The course will also include an introduction to Cascading Style Sheets (CSS), an important presentation initiative, and Universal Design, the process of incorporating accessible design features into Web pages. (2 lec, 2 lab)

CST 154 Object-Oriented Programming I **3 Credits**
Explores computer programming and object-oriented language using Java. This course provides an understanding of program structure, procedures, and event programming through the use of hands-on labs and programming assignments. (2 lec, 2 lab)

CST 161 A+ Certification for Healthcare IT **4 Credits**
Covers the fundamentals of personal computer hardware and operating systems by using the CompTIA A+ exam objectives as the framework. Hardware topics include the microprocessor, power supplies, bus structure, interrupts, DMA, memory, storage devices, serial and parallel port technologies, video displays, and modems. The laboratory component of this course is geared toward increasing student proficiency in setting up and servicing PC hardware and operating systems through the use of hands-on exercises. Diagnostic tools and troubleshooting techniques are emphasized throughout the course. (3.5 lec, 4 lab)

CST 162 Net+ Certification **4 Credits**
Provides students with the knowledge to become industry-certified as a network technician. Prepares the student for two different industry certifications: Network Pro certification and Net+ certification. Designed to help students gain real-world skills that they will use every day on-the-job as a network technician. (3.5 lec, 4 lab)

CST 163 Computer Applications **4 Credits**
Introduces and provides basic practice in the four most commonly used computer applications in healthcare: word processing, spreadsheet, database, and presentation. Emphasis is placed on the utilization of these programs by healthcare professionals in a healthcare environment**.** (3.5 lec, 4 lab)

CST 164 Healthcare IT Certification **4 Credits**
Covers the fundamentals of healthcare IT (HIT) by using the CompTIA Healthcare IT Technician (HIT-001) exam objectives as the framework. An in-depth and comprehensive view of HIT is provided by examining healthcare regulatory requirements and the functions of a healthcare organization, including its medical business operations, IT hardware, software, networking, and security. Students will be provided the foundation necessary to help prepare them for the CompTIA HIT certification exam. (3.5 lec, 4 lab)

CST 170 Customer Service Concepts **3 Credits**
Provides an overview of customer service concepts and terminology and exposes students to various customer service challenges. Students learn to identify different types of customer behaviors, determine customer needs through active listening, become effective verbal and non-verbal communicators, hone telephone customer service skills, learn how best to handle difficult customers, become aware of how to offer customer service within a diverse organizational environment, take steps to encourage customer loyalty, and practice service recovery. (2 lec, 2 lab)

CST 203 Systems Analysis and Design **3 Credits**
Covers the conceptual, technical, and managerial foundations for systems analysis design and implementation as well as project management principles for systems development. Both traditional (structured) and object-oriented (OO) approaches to systems analysis and design will be covered. (2 lec, 2 lab)

CST 205 Network Architecture **3 Credits**
This course extends the student's knowledge and practical experience with Wide Area Networks (WANs), Integrated Services Data Networks (ISDN), ATM and Point-to-Point Protocols (PPP) and Frame Relay design, configuration and maintenance, with special emphasis on design techniques and network analysis.

CST 221 Network Security **3 Credits**
Studies the fundamentals and implementation of network security including secure access methods and vulnerabilities in network protocols, operating systems, and network applications. (5 weeks, 5 lec, 10 lab)

CST 226 Wireless Networking **3 Credits**
Covers both theoretical issues related to wireless networking and practical systems for both wireless data networks and cellular wireless telecommunication systems. Students will also work on a project that addresses some recent research issues in wireless and mobile networking. (5 weeks, 5 lec, 15 lab)

CST 232 Server Operating Systems **3 Credits**
Introduces students to server operating systems. The basics of server operating systems will be presented, including installation and configuration, client management, configuring and managing print services, managing data storage, managing network services, and creating a reliable server environment. (5 weeks, 10 lec, 5 lab)

CST 235 Database Systems Design and Implementation **3 Credits**
Covers the basics of database design and implementation. Topics include the principles and methodologies of database design, database application development, normalization, relational database models, and database languages. Principles are applied by performing written assignments and a project using an SQL database system. (2 lec, 2 lab)

CST 236 Object Oriented Analysis and Design **3 Credits**
Building on the foundation learned in database systems and design, students explore techniques, tools and methods used in the object-oriented approach to developing applications. Students learn how to model and design system requirements using cases and scenarios, class diagrams and sequence diagrams. (2 lec, 2 lab)

CST 240 Data Mining **3 Credits**
Focuses on how to discover patterns and relationships in data. Using data mining principles, students will mine data from large databases to create customized reports. (5 weeks. (2 lec, 2 lab)

CST 246 Virtualized Computer Systems **3 Credits**
Introduces students to techniques necessary to make virtualization work in enterprise environments. Students will be exposed to the preplanning needed to implement virtualization, how to transition from a physical to a virtual environment, virtual management, how to automate basic management tasks, and the role virtualization plays in networking and storage. (5 weeks, 10 lec, 5 lab)

CST 248 Capstone **1 Credit**
Serves as the capstone course for all computer networking students and will integrate all of the networking skills acquired throughout the computer networking degree program. In this course, students will design, develop and implement a network in a simulated or real-world environment. (15 weeks, 1 lec, 0 lab)

CST 251 Cloud Computing I **3 Credits**
Introduces cloud computing concepts, terminologies and methodologies with hands-on labs and basic programming assignments, providing a basic exposure to cloud platforms. Topics include the basic building blocks of cloud computing such as virtualization, load balancing, scalability and elasticity, troubleshooting and security. (2 lec, 2 lab)

CST 253 Object-Oriented Programming II **3 Credits**
Explores the way information is accessed with the use of mobile devices and introduces mobile application development using Java. Topics covered will include activity lifecycles,

user interface and input, data management and deploying mobile applications. (2 lec, 2 lab) **Prerequisite: CST 154**

CST 254 Cloud Computing II **3 Credits**
Explores cloud applications and development using Amazon Web Services. Students will learn the building blocks for computing storage and content delivery through hands-on experience with core services while exploring the differences in security roles and responsibilities. (2 lec, 2 lab) Prerequisite: CST 251

CST 256 Software Development and Marketing **3 Credits**
Explores the software development process with an introduction to the software development life cycle, development methodologies and team-based production concepts. The course will also cover basic considerations and strategies when marketing software to consumers. (2 lec, 2 lab)

CST 271 Help Desk Operations **3 Credits**
Introduces students to the roles and responsibilities of those who provide information technology (IT) support via an organization's help desk. Individuals examine how to develop and define help desk operations. (2 lec, 2 lab)

CST 274 Help Desk Internship **6 Credits**
Offers students opportunities for supervised work experiences in the IT Help Desk field. This course combines classroom theory with on-the-job training. The student is responsible to the employer for the various work responsibilities and is also responsible to the course instructor using a work journal. A portfolio will be required to fulfill the academic requirements of the course. (5 lec, 255 internship contact)

CUL 112 Culinary Skills Development **3 Credits**
Engages students in discussion of such culinary topics as menu development, tool and equipment identification and familiarization, and the history of professional cooking. Students will compose a professional portfolio, which can be helpful in garnering an externship of their choice. Other course topics include the development of menus and recipes, including equivalents, conversions, and food costing. (3 lec)

CUL 124 Culinary Arts I **6 Credits**
Focuses on the development of the fundamental skills necessary to work successfully in a professional kitchen. Product and equipment identification and usage is practiced and discussed. Areas of concentration include cold foods, stocks, soups and sauces, basic cooking methods, and an introduction to basic bread and dessert making. Students will compose a professional portfolio, practice basic foodservice mathematics, and practice menu balance and development. (4 lec, 8 kitchen) **Pre <u>or</u> Corequisites: CUL 112, CUL 131**

CUL 125 Culinary Arts II **6 Credits**
Builds upon the components introduced in Culinary Arts I. Students develop and practice more advanced techniques of professional cooking and plating styles. American Regional Cuisine will be studied and practiced throughout the semester. Catering and healthy cuisine will be an integral part of the course. Students will participate in the execution of

special events, as well as selected in-house competitions. (4 lec, 8 kitchen) **Prerequisites: CUL 112, CUL 124, CUL 131**

CUL 131 Culinary Sanitation and Theory **3 Credits**
Addresses the principles of food microbiology, important foodborne diseases, standards that are enforced by regulatory agencies and applied measures for the prevention of foodborne diseases and other microbiological problems. HACCP systems will be discussed. Upon successful completion of a comprehensive exam, students will be ServSafe certified by the Educational Foundation of the National Restaurant Association. (3 lec)

CUL 141 Food Service Management **3 Credits**
Explores the basic principles of food service management by defining basic technical skills in the areas of organizing, directing, staffing, menu planning and pricing. This course provides a foundation of knowledge and attitudes required for effective kitchen management. Upon successful completion of a final exam, students will be awarded a certificate by the nationally recognized Educational Institute of the American Hotel and Lodging Association. (3 lec)

CUL 214 Advanced Culinary Skills **3 Credits**
Develops both advanced culinary knowledge and technique. Advanced garde manger production, mixology and alcohol awareness, as well as the selection and service of wines are part of this course. Guest demonstrations, lectures and practice in specialized areas of culinary arts such as ice sculpting and tallow are examples of the specialty areas both discussed and practiced. Students will be introduced to the food service industry as well as related industries in a more global realm. (1 lec, 4 lab) **Prerequisites: CUL 112, CUL 124, CUL 125, CUL 131, CUL 141, CUL 215; Corequisite: CUL 262**

CUL 215 Culinary Externship **3 Credits**
A 240-hour paid externship begins after the completion of the first academic year. Students explore a variety of career paths while working in the field. Students will find their own externship employment subject to approval by the instructor. A portfolio will be required to fulfill the academic requirements of this course. (240 working hours for the course) **Prerequisites: CUL 125, CUL 141**

CUL 218 Classical European Pastry Arts **3 Credits**
Students prepare classical European pastry items. Fundamental as well as specialized technique will be practiced and reinforced through lecture, demonstration and practice. Students will prepare a wide variety of desserts including old world and new world examples. (1 lec, 4 lab) **Prerequisites: CUL 125, CUL 215**

CUL 230 Regional Italian Cuisine **3 Credits**
From Piedmont in the north to Sicily in the far south, no one area of the world encapsulates quite as much diversity in food styles as Italy. In this advanced culinary course, students are introduced to the culture, cuisine and unique methods of food preparation that make Italian cuisine one of the most popular in the world. Students will prepare and sample foods that range from the well-known to the somewhat exotic.

Italian emphasis on freshness, quality, and health benefits of the Mediterranean diet will be emphasized throughout the course. (1 lec, 4 lab) **Prerequisite: Instructor permission**

CUL 262 Classical French Cuisine **5 Credits**
Introduces students to the cuisine and culture of the classical and provincial regions of France. Students learn French cooking methods, theory, and culinary terminology. Students work in the traditional team systems that French table service dictates. Tableside cookery will be discussed and practiced throughout the semester. Practical experience will be gained through the operation of the college's in-house restaurant. Kitchen and dining room management skills will be presented and practiced daily. (2 lec, 12 kitchen) **Prerequisites: CUL 112, CUL 124, CUL 125, CUL 131, CUL 141, CUL 215.**

CUL 264 International Cuisine **5 Credits**
Offers students a culinary adventure that may include classical cuisines of Italy, Greece, Austria, and Spain. Other cuisines might include Thailand, China, the Caribbean and more. Students are exposed to the techniques involved in the preparation of items such as tapas, osso bucco, and pad Thai. Students research a selected area of foreign cuisine. Practical experience will be gained through the operation of the college's in-house restaurant. The 'front-of the-house' facet will allow students to expand upon service methods and dining room management skills learned in prior courses. Additional kitchen management procedures will be discussed and practiced as well including inventory management, facilities management, and food ordering. (2 lec, 12 kitchen) **Prerequisite: CUL 262**

DGD 113 Introduction to Photoshop **3 Credits**
Designed to give students the acquisition of skills necessary to help build a basic foundation in digital image correction and manipulation. Upon completion of this course, students will be able to use Photoshop as necessary for commercial graphic art. Students will create, manipulate, edit, and enhance digital imagery. The student will be required to solve problems on their own, using textbooks and reference material. (2 lec, 2 lab)

DGD 114 Photoshop for Photographers **3 Credits**
Explores the techniques and applications of acquiring, manipulating and producing digital photographic images using Adobe Photoshop. Technical skills for digital photography will be covered including post-image capture processing, photo manipulation, basic color management, photo restoration, and photographic printing. (2 lec, 2 lab**)** **Prerequisite: DGD 101 or ART 101**

DGD 120 Digital Illustration **3 Credits**
This course will cover digital illustration methods through the application of two-dimensional vector and pixel-oriented imagery (raster). Students will acquire hands-on experience with vector illustration, focusing on but not limited to, the pen tool, direction selection tool, gradients, masking, filters/effects, transparencies and pathfinder. Fine-tuning anchor points, shapes and Bezier handles along with color theory will be addressed. This course uses the Current Version of Adobe Illustrator. (2 lec, 2 lab)

DGD 131 Introduction to Page Layout & Design **3 Credits**
Covers understanding page design using graphic design applications. Adobe In-Design software will be used to design publications, posters and promotional materials. Layout software, terminology, procedures and symbols will be used to complete and critique relevant problems in page design. Development of critical thinking skills and analysis, as they apply to graphic design will be emphasized. Introduction to Page Layout will also cover an historic overview of print processes and the evolution to current technology. (2 lec, 2 lab)

DGD 133 Marketing Communications **3 Credits**
Students will learn the tools of marketing and social media, how to understand and establish an online profile as well as ways to connect with others in this era of participating in the many to many media. They will learn to effectively use and *choose* the right tools to help achieve individual goals. Weekly classes will focus on sifting through the vast array of these tools and this knowledge is imperative to managing an online Profile and marketing presence. (2 lec, 2 lab) **Prerequisite: DGD 113**

DGD 201 Graphic Web Design **3 Credits**
Presents the principles for planning, designing and executing attractive yet informative web pages and web sites. This course explores factors that affect web layout and design such as browser choice, screen-resolution, navigation, connection speed, typography, graphics and color as well as incorporating these elements into the fundamentals of building a web site. The current versions of Adobe InDesign are used in this course. (2 lec, 2 lab) **Prerequisite: ART 112, DGD113 and DGD131**

DGD 221 Introduction to Typography **3 Credits**
Course covers understanding type in graphic design applications. Students will use type as a design element in publications, posters and promotional materials. Typographic terminology and proofreading procedures and symbols will be used to evaluate, complete and discuss relevant problems in typography. Development of critical thinking skills as they apply to typography in graphic design will be emphasized. The course will also cover an historic overview of typography and the evolution to current technology. (2 lec, 2 lab) **Prerequisites: ART 112 and DGD 120**

DGD 222 3D Modeling and Animation **3 Credits**
This course will provide the student with the tools and techniques of the industry leading software 3Ds MAX. Students will develop a firm foundation of the software by working on instructor-led projects throughout the semester. The main skills the student will acquire during this course will be creating models, creating materials, creating lighting, creating renderings, creating animations, and creating outputs. (2 lec, 2 lab) **Prerequisite: DGD 113**

DGD 224 Introduction to Time-Based Media **3 Credits**
Introduces the student to the design of media projects that have duration as a dimension which viewers experience over time (Also referred to as 4D art and design). Topics will include capturing high quality audio and video with DSLR cameras, along with timelines and editing in the Adobe Creative Suite, and final production of professional time-based

media compositions. Students will explore 2D art elements along with time-based design forms such as music and poetry in relation to audio/video production. (2 lec, 2 lab) **Prerequisites: ART 112 and DGD 113**

DGD 230 Professional Business Practices 4 Credits
This course provides the student with the employment experience that is typical for the Digital Graphic Design industry. It is designed to present the understanding of what working in a design office would entail. Collaborative projects (when available) with local firms, government, utilities, or other employers ensure a significant work experience. This class will also give the student the opportunity to develop a portfolio for job interviews, or application to other institutions of learning. The student will be required to meet with the instructor on a weekly basis to discuss the status of the portfolio and to go over new assignments for supplementing the portfolio. The student will be using various software in the development of the portfolio. (0 lec, 8 lab**) Must be completed during the student's last semester. Prerequisite: ART 112, DGD113, DGD120 and DGD131**

DGD 231 Printing and Publishing 3 Credits
This course examines current printing and digital output technologies used in commercial Graphic Art. This class will cover the History of Offset Lithography through current printing technologies and media (paper) as well as web and tablet/mobile device based publishing. (2 lec, 2 lab) **Prerequisites: ART 112, DGD 113, DGD120 and DGD 131**

DGD 232 Advanced Digital Graphics 3 Credits
This course will introduce students to advanced topic in Digital Graphic Design through the use of various software and hardware. This class will focus on the main graphic principles of components, composition, and concepts. Students will be encouraged to solve problems on their own as well as in teams. Students will learn the digital graphics work flow, utilizing the 3C principles and the appropriate software and hardware. (2 lec, 2 lab) **Prerequisites: ART 112, DGD113, DGD 120, and DGD 131**

DTG 101 Plumbing Print Reading 2 Credits
Introduces drafting and print reading as related to the Plumbing industry with special emphasis on residential and light commercial buildings. (2 lec)

DTG 121 Architectural Drafting I 3 Credits
Introduces the equipment and procedures used in board drafting, as well as an introduction to print reading. Emphasis is placed on residential construction. Areas to be covered include site plans, foundation plans, floor plans, elevations, cross-sections, and kitchen layouts. (2 lec, 2 lab)

DTG 123 Drafting for Cabinetmaking I 3 Credits
Introduces the equipment and procedures used in board drafting, as well as an introduction to print reading. Emphasis is placed on design and drafting for cabinetry and fine furniture using industry standards. Areas to be covered will be use of manual drafting equipment, sketching, lettering, line techniques, orthographic drawing, isometric drawing, auxiliary views, and dimensioning. At the end of the course the student will be

able to produce a set of drawings showing all views and detail views needed in order for a woodworker to produce the drawn product. (Pending approval)

DTG 124 Architectural Drafting II **3 Credits**
A continuation of DTG 121 Architectural Drafting I with the reading of blueprints and drafting for residential homes. Other areas covered will be site plans. Additional attention will be given to the reading ad drafting of commercial drawing and heavy timber frame construction. (2 lec, 2 lab).

DTG 125 Drafting for Cabinetmaking II **3 Credits**
Designed for students that are new to AutoCAD and introduces them to basic concepts of creating mechanical and architectural drawings using this software package. Assignments will be introduced that include coordinate systems, creating geometric shapes, editing object elements, modifying existing objects, working with layers, adding text to drawings, dimensioning, creating layouts and view ports, managing object visibility in selected view ports, and plotting drawings using external output devices. This course also places a strong emphasis on working from written specifications. **Prerequisite: DTG 123**

DTG 223 Architectural Drafting III **3 Credits**
Introduces computer aided drafting. Students are introduced to basic drawings and editing commands using industry standard AutoCAD software. Methods and techniques used in DTG124 are encouraged through hands-on exercises and drawing problems. (2 lec, 2 lab) **Prerequisite: DTG 124**

DTG 225 Drafting for Cabinetmaking III **3 Credits**
This class is designed to be an introduction to feature based parametric modeling for woodworking. We will use Autodesk Inventor software to execute models that meet specific design requirements. Sometimes referred to as dimension driven modeling, we will cover conceptual and practical aspects of this CADD software. We will cover piece design, and assembly design and generate drawings from these examples (orthographic projection, isometrics, dimensioning, detail, auxiliary views, sectional views, exploded views and assembly drawings). Working from simple component design through complex assembly modeling we utilize the design process as it applies to function driven problem solving. Students will be asked to do research and come up with individual designs as part of this problem solving. Students will also be directly involved in CNC production of designed parts. **Prerequisite: DTG 125**

DTG291 Special Topics in Computer Aided Drafting **3 Credits**
Focuses on a different topic each time it is offered. Can be taken more than once.

ECE 110 Child and Adolescent Development **3 Credits**
Studies stages of development from prenatal periods through adolescence. Theories of child development and the learning process will be introduced. The effects of environment and the adult's role in supporting development and learning will be explored. Physical, cognitive, and social/emotional domains of development will be emphasized. (15 weeks, 3 lec) ECE/EDB students must achieve a grade of C or higher to pass the course.

ECE 116 Early Literacy Development **3 Credits**
Presents children's literature from the perspective of language development. Examines various forms of literacy and offers methods for choosing appropriate literacy experiences for young children. (3 lec) **Corequisite: ECE 110 or instructor permission**

ECE 117 Observing and Recording in the Field **3 Credits**
Explores methods of observing, recording, and assessing children's development and learning. Skills acquired as a result of this course will provide the students with the needed information to assess development and plan activities and experiences to individualize learning. Legal and ethical practices and confidentiality issues will also be discussed. (2 lec, 1 practicum). A grade of C or higher must be achieved to pass. *Open only to students enrolled in the Education Track programs.* **Prerequisite: ECE 110 or instructor permission**

ECE 127 Cognitive and Affective Development **3 Credits**
Theoretical aspects of cognitive and affective development will be studied with regard to the whole child. Experiences that promote learning, social relationships, self-awareness and moral development will be explored. (3 lec) **Prerequisite: ECE 110 or instructor permission**

ECE 131 Infant and Toddler Curriculum **3 Credits**
Explores infant and toddler curriculum frameworks and methods. Students will review growth and development of these two age groups with special emphasis placed on the importance of relationships and bonding with caregivers. Planning developmentally appropriate curriculum that makes use of effective healthy and safe routines and environments will be taught. Students will practice writing learning experience plans (individual and group) based on state standards. How to support and partner with parents will be stressed in this course. (3 lec) **Prerequisite: ECE 110 or instructor permission**

ECE 216 Survey of Exceptionalities **3 Credits**
Studies individuals with exceptionalities, birth to age 21. Laws that impact persons with exceptionalities are reviewed. The process of screening, pre-referral and referral are discussed. Each category of exceptionalities, as defined by IDEA, is overviewed with an emphasis on identification, understanding of basic features and appropriate accommodations. Inclusionary and family-centered practices are emphasized. (3 lec) **Prerequisite: ECE 110 or instructor permission**

ECE 220 Numeracy, Environments and Integrated Curriculum for Young Children **3 Cr**
Teaches design of developmentally appropriate curriculum for young children from birth to age eight. Emphasis is on the various content areas and how to plan appropriate programs and environments such as learning centers, play areas, and outdoor spaces. Students will develop an understanding and awareness of planning and designing programs that embrace diversity. An overview of various curriculum models will be introduced. (3 lec) **Prerequisite: ECE 110 or instructor permission**

ECE 221 STEM Curriculum for Young Children **3 Credits**
Explores developmentally and individually appropriate curriculum using a frame-work that includes the philosophy, goals and objectives, physical environment, teacher's role and parent's role in designing curriculum for young children birth to eight years. Students will explore various methods and techniques for supporting development and learning for children with exceptionalities. Specific early childhood curriculum models will be reviewed in depth and compared to other curriculum models. (3 lec) **Prerequisite: ECE 220 or instructor permission**

ECE 229 Early Childhood Professions **3 Credits**
Overviews the early childhood profession and the components necessary to begin and run an early care and education program. The following topics are included: mission statements, program development, professional development, financial issues in early childhood, component management, parent communication and community relations. Emphasis is on operating quality programs and effective supervision. (3 lec) **Prerequisite: ECE 117 or instructor permission**

ECE 232 Field Placement II **4 Credits**
Expands on the competencies acquired in ECE 117, Observing and Recording in the Field, by allowing students to further develop skills and strategies to effectively plan and implement developmentally appropriate experiences for young children in an approved early childhood environment. Experiences will provide an opportunity for students to assume increased responsibility for supporting children's development in all domains. (2 lec, 2 practicum). Must have a grade of C or higher to pass this course. *Open only to matriculated students in Early Childhood Education.* **Prerequisite: ECE 117**

ECE 233 Field Placement III **6 Credits**
Expands on the competencies acquired in ECE 232, Field Placement II, by focusing on the skills needed to work as part of a teaching team and transform knowledge of child development into developmentally appropriate curriculum planning. Opportunities to gain experiences by communicating effectively with parents, staff and children in an approved early childhood environment will be provided. Increased responsibility for all aspects of teaching and leading children including handling transitions, behavior management and planning curriculum will be emphasized. (2 lec, 4 practicum) Must have a grade of C or higher to pass this course. *Open only to matriculated students in Early Childhood Education.* **Prerequisite: ECE 232**

ECO 200 Money and Life **3 Credits**
Introduces economic thinking by revisiting the historical causes for today's predominant economic structure: market-based society. Starting with Greek and Roman social conditions and moving on through the Dark Ages and the Renaissance, into the Industrial Revolution and Great Depression, and beyond the post-WWII expansion and into the Information Age, students connect historical events with economic thinking and theories. (3 lec)

ECO 221 Introduction to Microeconomics 3 Credits
Course provides an overview of the principles of microeconomics and their use in understanding, critique, and analysis of economic issues. Topics emphasized include the economic decision-making of individuals and firms; markets and the price mechanism; market structures; uncertainty, control of resources, and income; market failures; and the role of government in markets. (3 lec)

ECO 222 Introduction to Macroeconomics 3 Credits
Course provides an overview of the principles of macroeconomics and their use in understanding, critique, and analysis of economic issues. Topics emphasized include the international trade, aggregate supply and demand, national income and accounting, the overall functioning of an economy, the monetary system, unemployment, inflation, monetary and fiscal policy, and government intervention in the economy, as well as numerous contemporary economic issues. (3 lec)

EDB 101 Introduction to Career and Technical Education (CTE) 3 Credits
Provides the new professional Career and Technical Education (CTE) teacher the necessary skills to successfully navigate the first year of teaching at a CTE school. Classroom/lab management, safety, unit and lesson plans, basic school regulations and law, assessment strategies and current CTE topics will be introduced. Instructors will model various teaching styles and strategies and engage students in relevant activities to build confidence and knowledge for a successful first year teaching experience. Additional course work and professional development will be strongly encouraged. (3 lec, 0 lab) **Prerequisite: Must be a first year CTE instructor.**

EDB 112 Classroom/Lab Management and Safety for CTE 3 Credits
Provides the Career and Technical Education (CTE) teacher a broad overview of Classroom Management and Shop Safety as it pertains to teaching and learning. Discussion topics and investigations include: Philosophy & Purpose of class management and safety; Teacher/Student Roles and Responsibilities; Classroom/Lesson Set-Up; Shop Set-Up; Time Management & Time Efficiencies; Designing Rules & Procedures; Discipline Strategies; Recordkeeping; Shop Safety & Teacher Accountability. The class includes individual and group projects. Each student will also develop a written comprehensive Classroom Management & Shop Safety Plan for their content area based on industry standards and the research, writing, and various projects completed in this class. **Prerequisite: EDB 101 or instructor permission**

EDB 115 Development and Guidance of Behavior 3 Credits
Reviews the social and emotional development of school age children and the principles for understanding and guiding behavior. Dealing with challenging behaviors will be explored. Topics will include proactive positive behavior management, functional behavior assessment, and the acquisition and support of social skills. (3 lec) **Prerequisites: ECE 110, ECE 117 or instructor permission**

EDB 202 Introduction to Education – Schools, Students and Society 3 Credits
This course provides an overview of the field of education in the United States. Identifies the roles and responsibilities of students, schools and society and the relationship to the

educational system. Looks at the various influences that affect education including political, economic, social, academic and ethical. Examines the diverse needs of students and their families while working as part of a collaborative team. (3 lec) **Writing intensive course**. **Pre or Corequisite: ENG 101**

EDB 204 The Teaching Process **3 Credits**
Examines instructional planning and lesson design, grouping, classroom environment, management strategies and assessment. Reflective practice, responsive teaching and learning will be emphasized. (3 lec) **Corequisite: EDB 232**

EDB 212 Assessment and Evaluation in CTE Programs **3 Credits**
Designed to provide the student a broad overview of assessment and evaluation as it pertains to teaching and learning in a Career and Technical Education Program (CTE). Students will investigate the historical context, philosophy and purpose of assessment and evaluation as it impacts curriculum, design, pedagogy and skill mastery for the student and teacher. Formative and summative assessments, authentic and alternative assessments, rubrics and standards based testing will be covered. Individual projects will be based on the students' own program at the CTE center to develop a competency based profile to match assessments with industry standards and the Common Core of Learning. (3 lec) **Prerequisite: EDB 101**

EDB 213 Working with Students with Autism **3 Credits**
Examines Autism Spectrum Disorder. This history of autism will be reviewed as well as current practices in making appropriate diagnosis of this exceptionality. Strategies for supporting development and learning in all domains will be explored. An emphasis will be placed on social skills and language development. Various educational techniques will be explored. (3 lec) **Prerequisite: ECE 216 or instructor permission**

EDB 217 Integrating Literacy into Career and Technical Education Environments **3 Cr**
Provides teachers in Career and Technical Education (CTE) environments with strategies to integrate literacy instruction in the various disciplines. Will cover all aspects of literacy including; reading, writing, speaking, listening, research and information literacy. Will introduce students to various instructional strategies and activities to promote and teach literacy in the CTE content areas. Interdisciplinary curriculum and integrated lesson planning will be examined. (3 lec) **Prerequisite: EDB 101 or instructor permission**

EDB 221 Educational Psychology **3 Credits**
Studies human development, learning cognition and teaching. An emphasis will be on the theories and research and their application to educational settings. (3 lec) **Prerequisite: PSY 101 or ECE 110 or instructor permission**

EDB 231 Behavioral Health Professional **3 Credits**
Designed to give students the competencies to provide in-home services to children and families with developmental disabilities. Principles of behavior, trauma, treatment planning and family functions will be emphasized. Instructional strategies for teaching children behavioral skills and utilizing community resources to assist children and families will be included. First Aid and CPR certificate level instruction is delivered within the

course. Students who complete the course with a grade of C or higher will earn a Behavioral Health Professional certificate. (3 lec)

EDB 232 Field Experience II **4 Credits**
Designed to bridge theory with practice. Students will apply strategies and methods learned in class to the practice of planning for and working with learners in educational settings. Students will work with children of diverse ages, cultures and abilities and begin to develop appropriate learning activities for individual or groups of students. (2 lec, 2 practicum) Must achieve a grade of C or higher to continue with Field Placement III. *Open only to students matriculated in the Education program.* **Prerequisite: ECE 117; Corequisite: EDB 204**

EDB 233 Field Experience III **5 Credits**
Expands on competencies acquired in Field Placement II by allowing students to further develop skills in planning and implementing appropriate educational experiences for individuals. Students will increase their responsibilities for supporting learners in educational settings. Students will practice reflective teaching and focus on becoming an effective team member in the classroom environment. (2 lec, 3 practicum) *Must achieve a grade of C or higher to pass this course.* **Prerequisite: EDB 232**

ELC 100 Introduction to Electricians Technology **3 Credits**
Provides an introduction to the expectations and requirements of today's Electrician. Emphasis will be placed on promoting success in the Electrician's Technology program. Career building topics include employability skills, construction basics, safety including the OSHA 10-hour card, orientation to the electrical trade, and communication skills. Technical topics include introduction to DC and AC circuits, Ohm's Law, the power formula, right triangle trigonometry, vector addition, electrical components, and an introduction to the NEC. (3 lec) ***Corequisite*: ELC 111**

ELC 111 Basic Electricity I **3 Credits**
Studies the principles of direct current electricity, focusing on the theoretical concepts of direct current circuits and instruments as they apply to electrical and electronic components and equipment. (3 lec) **Prerequisite: AR Accuplacer score > 65; Corequisite: ELC 100**

ELC 112 Basic Electricity II **3 Credits**
Considers the principles of alternating current electricity, focusing on the theoretical concepts of alternating current circuits as they apply to electrical and electronic components and equipment. (3 lec, 3 lab) Prerequisite**: ELC 111 with grade of C or higher or instructor permission; Corequisite: MAT 113**

ELC 121 National Electrical Code **3 Credits**
Reviews the code rules found in the National Electrical Code, NFPA 70, to ensure safe installation of electrical wiring and equipment. (3 lec) **Prerequisite: High School Diploma, GED or instructor permission**

ELC 131 Basic Electronics I **3 Credits**
Presents the principles of electronics beginning with semi-conductor theory. Rectification, transistors, SCR's, TRIAC's and optoelectronic devices are studied. (3 lec, 0 lab) **Prerequisite: ELC 112 with grade of C or higher or instructor permission**

ELC 141 Electric Motors **3 Credits**
Studies the principles of electric motors and generators as they apply to the electrical industry. Students install electric motors and diagnose problems with them. (3 lec) **Prerequisite: ELC 161**

ELC 151 Electrical Controls I **3 Credits**
Addresses concepts, materials, diagrams, and circuits relative to residential wiring applications, along with appropriate National Electrical Code articles. (3 lec)

ELC 152 Electrical Controls II **3 Credits**
Teaches the principles and components of starting, accelerating, protecting, and stopping alternating current motors. (3 lec) **Prerequisite: ELC 151 with grade of C or higher**

ELC 161 Transformers **3 Credits**
Covers the principles of transformers and three-phase power, and diagnosing their service problems in the electrical industry. (3 lec) **Prerequisite: ELC 112 with grade of C or higher**

ELC 171 Electrical Blueprint Reading **3 Credits**
Covers the principles of commercial and industrial electrical blueprint layouts, with emphasis on specifications, estimating procedures, interpreting one-line diagrams, power distribution layouts, and lighting layouts. (3 lec)

EMS 100 First Responder **2 Credits**
This entry level course is designed to prepare students for the role of first responder. Particular focus is given to lifesaving techniques that are designed to stabilize the patient before the ambulance arrives. Upon successful completion of this course and national certification examinations, the student will be eligible for Maine State Licensure. (54 hours) **Prerequisite: Reading Comprehension exam**

EMS 121 First Aid in the Workplace **1.33 Credits**
This course reviews key workplace safety topics including scene safety and standard precautions. Coursework includes certification in American Heart Association CPR, the use of Automatic External Defibrillators and basic first aid. In addition, this class will review awareness of hazardous materials in the workplace. (27 hours)

EMS 123 Emergency Medical Technician **5.5 Credits**
Prepares ambulance and rescue personnel, police officers, and fire fighters to administer out-of-hospital emergency medical care. The laboratory component provides practice in patient assessment, airway management, CPR, automatic external defibrillation, oxygen delivery, hemorrhage control, splinting, spinal immobilization, childbirth, lifting and moving patients, and extrication. This course includes clinical experience in a hospital emergency department and/or ambulance service. Students who successfully complete

this course are eligible to sit for the National Registry of EMTs certification examination (117 hours) **Prerequisite: Successful completion of all EMCC and EMS Program Entrance Testing**

EMS 124 First Responder to EMT-Bridge 3.5 Credits
Prepares currently licensed First Responders (Emergency Responders) to administer out-of-hospital emergency medical care. The laboratory component provides practice in patient assessment, airway management, CPR, automatic external defibrillation, oxygen delivery, hemorrhage control, splinting, spinal immobilization, childbirth, lifting and moving patients, and extrication. This course includes clinical experience in a hospital emergency department and/or ambulance service. Students who successfully complete this course are eligible to sit for the State National Registry of EMTs certification examination. **Prerequisites: Successful completion of all EMCC and EMS Program Entrance Testing and Maine EMS Licensed First Responder.**

EMS 125 Advanced Healthcare Provider to EMT Bridge 4.5 Credits
Designed for experienced advanced allied health care providers (RN, PA-C, and NP) to provide exposure to the field of EMS. Students will complete a minimum of 84 hours of didactic and practical time, including a precepted internship with a local EMS agency. Goals of the course include review of EMS operations, provision of care in the out-of-hospital environment, and management of patients in the pre-hospital setting. Upon successful completion of this course, participants may apply to take the National Registry of EMTs certification examination and pursue state licensure as an EMT-Basic. (80 hours)

EMS 201 Fundamentals of EMS 3 Credits
Introduces the student to the role of the Advanced Life Support Provider. Topics covered include roles and responsibilities of ALS providers, medical terminology, self-care, and initial patient stabilization and management. Students will learn how to obtain a history and perform a physical assessment on a patient. (45 lec hours, 0 lab hours) **Prerequisites: Successful completion of all EMCC and EMS Program Entrance preadmission testing and all program admission requirements.**

EMS 202 Cardiac/Respiratory Emergencies 3 Credits
Provides an in-depth study of the respiratory and cardiovascular system. In the lab, students will learn advanced airway skills, perfect ventilation techniques, and perform basic cardiac rhythm interpretation. An introduction to the pathophysiology and management of cardiovascular and respiratory disorders will be provided. This course serves as a core course for the EMT-Intermediate (AEMT) licensure. This course serves as a core course for licensure as an Advanced EMT (AEMT) (30 lec hours, 30 lab hours) **Pre or Corequisite: EMS 201**

EMS 205 EMT – Intermediate Skills Seminar 2 Credits
This course serves two major purposes. First, it serves as a refresher for those currently licensed EMT Intermediates wishing to become paramedics. Second, it is a required course for students who will be licensed at the EMT Intermediate level. Students will review and practice all intermediate/advanced EMT skills in an interactive seminar format. The course includes multiple case studies, interactive lab sessions, and creative

teaching methods. The course concludes with mandatory skills tests to assure mastery of the topics covered in the intermediate/AEMT Curriculum. (15 lec hours, 20 lab hours) **Pre or Corequisites: EMS 201, EMS 202 or currently licensed AEMT**

EMS 206 Intermediate Clinical Preceptorship and Field Internship 3 Credits
This course provides students the opportunity to apply the didactic knowledge and skills developed in the classroom. In the pre-hospital and clinical setting, Students partner with pre-hospital providers at local ambulance services and clinical preceptors in various healthcare settings to develop skills in clinical decision-making, electro-cardiology, and management of acute and chronic disease. This clinical experience focuses on the skills needed to function at the Intermediate/AEMT level. (150 clinical hours) **Pre or Corequisites: EMS 201, EMS 202, EMS 205, and advisor approval.**

EMS 207 Advanced Cardiac Life Support Lab (AHA) 1 Credit
Teaches the standardized American Heart Association approach to managing cardiac emergencies and emergency resuscitation. Recommended after completion of EMS 203. (2 lab)

EMS 208 Advanced Emergency Cardiovascular Care 4.5 Credits
This course provides an in-depth study of the pathophysiology of cardiac and vascular disorders. Topics covered include the physiology, assessment, pharmacology, and treatment of acid base balance disturbances, cardiac rhythm alterations, 12- lead ECG analysis and the acute coronary syndrome. In the lab, students learn advanced paramedic skills such as cardiac arrest management and clinical decision making. Students completing the course will receive a certificate in Advanced Cardiac Life Support (ACLS). (There may be an additional cost for ACLS certification). This course meets and exceeds the Maine EMS required objectives for original 12-Lead ECG training. (45 lec hours, 45 lab hours) **Prerequisites: EMS 201, EMS 202, EMS 205, EMS 206, currently licensed AEMT, successful completion of all EMS required preadmission testing and advisor approval.**

EMS 210 Paramedic Emergencies I 2.5 Credits
This Course provides an introduction to emergency pharmacology and an in-depth study of the pathophysiology of airway and pulmonary disease and disorders. Topics covered include the physiology, assessment and treatment of airway and breathing disorders. In the lab, students learn advanced airway procedures such as endotracheal intubation, CPAP, capnography and clinical decision making. Students completing the course will meet and exceed the objectives of the Maine EMS Paramedic Interfacility Transfer Module (PIFT). (There may be additional cost for PIFT certification.) (30 lec, 15 lab) Prerequisites**: EMS 201, EMS 202, EMS 205, EMS 206, currently licensed AEMT, successful completion of all required EMS preadmission testing, and advisor approval.**

EMS 212 Emergency Care Across the Lifespan 2.5 Credits
This course provides students with the opportunity to study how growth and development impacts the delivery of emergency care. Topics include pediatric and neonatal emergencies, obstetrical care, geriatric emergencies, and age appropriate care. Provisions for providing emergency care to all age groups are presented. The normal

physiological changes of aging are reviewed. Students completing the course will receive certificates in Pediatric Advanced Life Support (PALS) and Geriatric Education for Emergency Medical Services (GEMS). (There may be an additional cost for PALS and GEMS certification). (30 lec hours, 15 lab hours) **Prerequisites: EMS 201, EMS 202, EMS 205, EMS 206, currently licensed AEMT, successful completion of all EMS required preadmission testing, and advisor approval.**

EMS 214 Paramedic Skills Seminar 2 Credits
This is the last course necessary to complete the paramedic program. This course is designed to provide students an intense lab experience that simulates professional paramedic practice. Students completing this course will practice the manipulative skills necessary to successfully pass the National Registry and State of Maine Paramedic Psychomotor Examination and to become professional field practitioners. Additional topics discussed will include, concepts of life-long learning, quality improvement, and the paramedic's role in community education. (10 lec hours, 45 lab hours) **Prerequisites: EMS 201, EMS 202, EMS 205, EMS 206, EMS 208, EMS 209, EMS 211, EMS 212, EMS 213, EMS 215, EMS 216, currently licensed AEMT, successful completion of all EMS required preadmission testing, and advisor approval.**

EMS 215 Paramedic Clinical Preceptorship and Field Internship I 3 Credits
This faculty directed practicum provides the opportunity for each student to develop competency in clinical skills within the hospital and pre-hospital setting. Clinical rotations occur in cardiac care units, newborn nurseries, labor and delivery, post-anesthesia units, one-day surgery, geriatrics, respiratory, cardiology, emergency room, operating room, and others. The pre-hospital rotation allows students to assume the role of the paramedic in order to perfect clinical and assessment skills. During this rotation, the student will primarily observe and assist the precepting paramedics. The student works under the direction of an experienced preceptor. (138 clinical hours) **Prerequisites: EMS 201, EMS 202, EMS 205, EMS 206, Pre <u>or</u> Corequisites: EMS208 and EMS 209, currently licensed AEMT, successful completion of all EMS required preadmission testing, and advisor approval.**

EMS 216 Paramedic Clinical Preceptorship and Field Internship II 2 Credits
This faculty directed practicum provides the opportunity for each student to develop competency in clinical skills within the hospital and pre-hospital setting. Clinical rotations occur in cardiac care units, newborn nurseries, labor and delivery, post-anesthesia units, one-day surgery, geriatrics, respiratory, cardiology, emergency room, operating room, and others. During the pre-hospital rotation, the student will begin to take a lead role in assessing patients and decision making. The student works under the direction of an experienced preceptor. (120 clinical hours) Prerequisites**: EMS 201, EMS 202, EMS 205, EMS 206, EMS 208, EMS 209, EMS 215, Pre or Corequisites: EMS 211 and EMS 212, currently licensed Intermediate/AEMT, successful completion of all APEMS required preadmission testing, and advisor approval.**

EMS 217 Paramedic Clinical Preceptorship and Field Internship III 3 Credits
This faculty directed practicum provides the opportunity for each student to develop competency in clinical skills within the hospital and pre-hospital setting. Clinical rotations

occur in cardiac care units, newborn nurseries, labor and delivery, post-anesthesia units, one-day surgery, geriatrics, respiratory, cardiology, emergency room, operating room, and others. During the pre-hospital rotation, the student will be expected to serve as the lead paramedic on all calls. The student works under the direction of an experienced preceptor. (146 clinical hours) **Prerequisites: EMS 201, EMS 202, EMS 205, EMS 206, EMS 208, EMS 209, EMS 211, EMS 212, EMS 215, EMS 216, Pre or Corequisites: EMS 213 and EMS 214, currently licensed AEMT, successful completion of all EMS required preadmission testing, and advisor approval.**

EMS 223 Introduction to Community Health 3 Credits
Presents a survey of theory and practice in community health. Specific attention is given to the public health system, voluntary health agencies, epidemiology, solving community health problems, and the role of community health education. A research paper about a selected community health problem or issue is required. (3 lec)

EMS 225 Biomedical Ethics 3 Credits
Presents an analysis of ethical issues arising within modern medicine and the health care professions, such as paternalism and truth-telling, euthanasia, abortion, modern reproductive technologies, nurse-patient and nurse-physician relationships, civil commitment, and allocation of scarce medical resources. (3 lec, 0 lab)

EMS 231 Paramedic Emergencies II 3 Credits
In this course, the student is given an intense introduction to the pathophysiology and management of selected diseases, based on body systems. Specific pathophysiologies include infectious and communicable diseases, allergies and anaphylaxis, vascular toxicology and hematology, neurological, endocrine, renal and gastroenterology emergencies and systems. An overview of common laboratory and diagnostic tests is presented. Students completing the course will receive a certificate in Emergency Medical Patients: Assessment Care and Transport (EMPACT). (Note: there may be an additional cost for EMPACT certification). (55 lec hours) **Prerequisites: EMS 210, 202, 205, and 206 and currently licensed AEMT, successful completion of all EMS required preadmission testing, and advisor approval.**

EMS 233 Paramedic Emergencies III 3 Credits
This course provides students with a comprehensive review of the pathophysiology, kinematics and management of the trauma patient. Topics include multi-systems trauma, spinal injury, chest and abdominal injuries, traumatic brain injuries, orthopedic injury, environmental emergencies and burn care. Students completing the course will receive a certificate in Prehospital Trauma Life Support (PHTLS). (Note: there may be an additional cost for PHTLS certification). (60 lec hours) **Prerequisites: EMS 210, 202, 205, and 206 and currently licensed AEMT, successful completion of all EMS required preadmission testing, and advisor approval.**

EMS 270 Community Paramedic Advocacy and Outreach 5 credits
An introduction to the role and function of the Community Paramedic (CP). The student will learn about the Community Paramedic's specific role and function as a member of the health care team and part of the community. The student will identify the

components of the role, define it, and explain the "scope of service" for the position of CP. Additionally, the student will learn about the role of the CP as an advocate for clients in the community. (5 lec.) **Prerequisite:** Current licensure as a NREMTP

EMS 280 Community Assessment 2 credits
Designed to introduce the role of the Community Paramedic (CP) as a member of the health care team in community assessment. The student will map the community health care services, describe the demographics of the community and assess their impact on the health of the clients. Additionally, the student will gain understanding of community health services in order to give advice on health care needs in the community. (2 lab) **Co-requisite:** EMS 270

EMS 271 Care and Prevention Development Strategies 5 credits
Introduces the responsibilities of the Community Paramedic (CP) for gathering appropriate patient/client information and maintaining accurate records, including documentation of encounters between the CP and the patient/client. The student will also learn about the CP's role in assessing health care needs and appraising health care conditions. (5 lec) **Prerequisites:** EMS 270 and EMS 280

EMS 281 Community Paramedic Clinical 5 credits
Provides the student with clinical training under the supervision of a medical director, physician, nurse practitioner, physician's assistant or public health provider. The student will recommend appropriate health and/or social care professionals for the patient, prioritize jobs, and provide both advice and care. The student's placement in the clinical is based on qualifications and past training and experience. (5 lab) **Prerequisite: EMS 271**

ENG 101 College Composition 3 Credits
Emphasizes rhetorical principles, accuracy of expression, organization, and longer essays in order to help students think logically and write clearly. In addition, students prepare a research paper. A passing grade in this course or its equivalent is a graduation requirement of all degree candidates. (3 lec) **Prerequisite: WP Accuplacer score $\geq$ 6**

ENGL 101 College Composition Lab 1 Credit
Small-group workshop facilitating peer-to-peer essay revision and writing improvement, taken in conjunction with ENG 101. Required for students with department-determined result on placement exam(s). For each of those students, a passing grade in this course is required to pass ENG 101. Graded Pass/Fail. (2 lab) **Prerequisite: WP Accuplacer score = 5 or departmental recommendation. Corequisite: ENG 101**

ENG 112 Introduction to Literature 3 Credits
Seeks to develop in students an appreciation of literature and insights into human values that can result from close studies of it. Students will read, discuss and write about selections that represent interpretive literature. (3 lec) **Writing Intensive Course. Prerequisite: ENG 101 with grade of C or higher <u>or</u> instructor permission**

ENG 116 Journalism Seminar **3 Credits**
This extensive specialty writing class is open to students who may take it as many times as they desire. Students will help write and publish the Eagle Eye, the campus bi-weekly newspaper. Class time will offer a focus beyond merely writing and publishing competent stories in print journalism; discussion periods will include analysis of writing for TV and radio broadcast stations and public relations offices. Students will work on a variety of writing assignments every semester covering hard news, features, profiles, in-depth stories and investigative stories, editorials and opinion pieces, and even specialty writing (business, sports and the arts). Different legal and ethical issues in the media will be considered each semester, including ones relating to privacy, obscenity, sunshine laws and the media's self-proclaimed status as the "Fourth Estate." (3 lec) **Writing Intensive Course**

ENG151 Honors Composition **3 Credits**
Engages students in rigorous critical and analytic reading, writing, research, and argumentation. Students will work with literary texts and expand the range of their inquiry to other disciplines. Replaces ENG 101 and ENG 112 for Liberal Studies students. Prerequisite: 7 or 8 on Accuplacer Writing Intensive Course

ENG 162 Creative Non-Fiction Writing **3 Credits**
Explores developing non-fiction material using fictional techniques such as dialogue and narrative voice. (3 lec) **Prerequisite: ENG 101 with grade of C or higher <u>or</u> instructor permission**

ENG 172 Creative Writing **3 Credits**
Provides students with the opportunity to explore and develop their own writing style in a mutually supportive environment. Focuses primarily on short fiction and poetry with consideration of other genres. (3 lec) **Writing Intensive Course. Prerequisite: ENG 101 with grade of C or higher <u>or</u> instructor permission**

ENG 205 Advanced Composition and Peer Tutoring **3 Credits**
Combines advanced work in individual and collaborative academic writing with training to be an English department-supervised writing tutor. (2 lec, 2 lab) **Prerequisite: ENG 101 with grade of B or higher**

ENG 212 Introduction to Film **3 Credits**
Introduces students to the history and analysis of American and international narrative film. (2 lec, 2 lab) **Writing Intensive Course. Prerequisite: ENG 101 with grade of C or higher <u>or</u> instructor permission**

ENG 214 Topics in Film **3 Credits**
Focuses on a different topic in film each time it is offered: may be taken more than once for credit. Topics will be determined by the department**.** (3 lec) **Writing Intensive Course. Prerequisite: ENG 101 with grade of C or higher <u>or</u> instructor permission**

ENG 215 Business and Technical Writing **3 Credits**
Gives students hands-on experience in writing for business and industry. Students will address a variety of writing situations by selecting appropriate methods of development, including letters and memoranda, informal and formal reports, technical instructions and a professional resume. In addition to written assignments, students will conduct a technical briefing at the conclusion of the course. (3 lec, 0 lab) **Writing Intensive Course. Prerequisite: ENG 101 with grade of C or higher or instructor permission**

ENG 222 True Crime **3 Credits**
Examines historic and contemporary accounts of criminal activity. Students will discuss such issues as the cultural influences on the crimes themselves and on the creation and reception of the accounts. In cases where these works have inspired--or even attained the status of--"literature", students will also consider the ways that the practices of fiction and nonfiction diverge or intersect. (3 lec) **Writing Intensive Course. Prerequisite: ENG 112 with grade of C or higher or instructor permission**

ENG 223 Science Fiction and Fantasy Literature **3 Credits**
Emphasizes techniques for close reading and writing about elements of Science Fiction and Fantasy literature. (3 lec) **Writing Intensive Course. Prerequisite: ENG 112 with grade of C or higher or instructor permission**

ENG 224 The Graphic Novel **3 Credits**
Students will study the graphic novel as literature, briefly investigating the history and evolution of sequential art, developing a vocabulary for evaluating and discussing the graphic novel as a narrative form, and closely analyzing representative works of personal and political memoir, social satire, and commercial escape. (3 lec) **Writing Intensive Course. Prerequisite: ENG 112 with grade of C or higher or instructor permission**

ENG 225 Literature by Women **3 Credits**
Examines the wide-ranging body of poetry, fiction, drama, letters, essays, journals and other literature by women from the Middle Ages to the present day. Emphasis will be placed on the artistic and cultural influences on—and implications of—these works and these writers. Usually offered in the fall semester. (3 lec) **Writing Intensive Course. Prerequisite: ENG 112 with grade of C or higher or instructor permission**

ENG 227 British Literature I **3 Credits**
Explores selected major and lesser-known works from the Medieval Period through the Eighteenth Century. (3 lec) **Writing Intensive Course. Prerequisite: ENG 112 with grade of C or higher or instructor permission**

ENG 228 British Literature II **3 Credits**
Explores selected major and lesser-known works from the Romantic Period through the Twentieth Century. (3 lec) **Writing Intensive Course. Prerequisite: ENG 112 with grade of C or higher or instructor permission**

ENG 233 Adaptations: Fiction and Film **3 Credits**
Examines in-depth the ways that films and literary texts intersect and diverge as they interpret and re-interpret narrative. (2 lec, 2 lab) **Writing Intensive Course. Prerequisite: ENG 112 with grade of C or higher or instructor permission**

ENG 235 Literary Theory and Criticism **3 Credits**
Introduces students to the theory and application of a variety of critical approaches to literature. Has practical applications for students who plan to pursue an English major, a secondary teaching degree, or a career in any discipline that requires critical thinking. **Writing Intensive Course. Prerequisite: ENG 112 with grade of C or higher or instructor permission** (3 lec)

ENG 241 Introduction to Drama **3 Credits**
Explores plays from a variety of historical periods, analyzing such issues as their cultural contexts and possibilities for interpretation. Students will read, discuss, write about, and perform selected works. (3 lec) **Writing Intensive Course**. **Prerequisite: ENG 101 with grade of C or higher or instructor permission**

ENG 242 Literature of the Child **3 Credits**
A survey course analyzing literature dealing with the child and childhood. Texts used will be from Western and non-Western works including memoir, fiction, poetry, film, autobiography, books for children and for young adults, essays and plays. (3 lec) **Prerequisite: ENG 101**

ENG 243 Folklore, Fairytales, Mythology and Legend **3 Credits**
Analyzes early and modern works of literature pertaining to mythology, legend, folklore, and fairytales across cultural boundaries. Texts used will be from Western and non-Western cultures as the class explores worldwide genre. *Writing Intensive.* **Prerequisite: ENG 101 with grade of C or higher**

ENG 291 Topics in Literature **3 Credits**
Focuses on a different topic in literature each time it is offered and may be taken more than once for credit. Topics will be determined by the department. (3 lec) **Prerequisite: ENG 112 with grade of C or higher or instructor permission**

ENG 292 Topics in Writing **3 Credits**
Focuses on a different writing topic/focus each time it is offered and may be taken more than once for credit. Topics will be determined by the department. (3 lec) **Writing intensive course. Prerequisite: ENG 101 with grade of C or higher**

EPT 116 DC Circuits **3 Credits**
Explores the fundamentals of DC Electricity. Topics examined include voltage, current, resistance, power, series and parallel circuits and circuit analysis theorems. Troubleshooting skills are emphasized. (45 hrs lec & rec, 30 hrs. lab) A **grade of C or higher is required to pass this course. Prerequisite: Admission into Electrical and Automation Technology**

EPT 123 Power Distribution **3 Credits**
Examines three-phase WYE and Delta systems, transformers (single-phase, three-phase and CT's, PT's, autotransformer, and buck-boost applications), switchgear, and other common power system components. Residential, commercial, and industrial power distribution will be covered. One-line diagrams, fault calculations, per unit calculations, arc flash, and other power systems analysis will be covered. A project using EasyPower software will be required. (1 lec, 2 lab) **Prerequisite: EPT 125**

EPT 125 AC Electricity **3 Credits**
Covers the fundamentals of magnetism, AC power generation, terminology, phase angles, reactance, oscilloscopes, and other test equipment. (3 lec) A **grade of C or higher is required to pass this course. Prerequisites: EPT 116 and MAT 119**

EPT 155 National Electrical Code **3 Credits**
Interpret and apply the National Electrical Code to common wiring installations. In addition to studying Chapters 1-4 of the NEC, real-world wiring installations will be examined. Prepares the student to sit for his/her State of Maine Journeyman Exam. (3 lec) **Must be enrolled in the Electrical and Automation Technology program.**

EPT 167 Fluid Power Technology **3 Credits**
Examines all aspects of pneumatic and hydraulic fluid power systems including component selection, component installation, function analysis, basic system design, troubleshooting, and testing techniques. (2 lec, 1 lab)

EPT 173 DC/AC Machines **3 Credits**
Provides the student with the tools to successfully select, install and maintain DC and AC rotating machines. Machines to be examined include DC shunt, series and compound motors and generators as well as single and three-phase motors and generators. (45 hrs lec & rec, 30 hrs. lab) **Prerequisite: EPT 123**

EPT 176 Programmable Controllers **3 Credits**
Explores the design, installation, and use of programmable automation controllers in industry. Students program the Allen Bradley SLC 500 and are introduced to other automation controllers. Students will learn how to turn a written description of an automated process into a working program. Specific skills associated with product selection, entering and editing ladder logic, documentation, communications, connectivity, and safety interlocks will be developed. (1 lec, 2 lab) **Prerequisite: EPT 245**

EPT 228 Industrial Electronics **3 Credits**
With an emphasis on applications and troubleshooting, this course takes a strong system approach that identifies the circuits and components within a system and helps students see how the circuit relates to the overall system function. This course will provide a solid foundation in semiconductor theory along with circuits containing diodes, zener diodes, BJTs, JFETS, and MOSFETs. (1 lec & 2 lab) **Prerequisite: EPT 125**

EPT 241 Linear Circuits **3 Credits**
Introduces the theory and application of operational amplifiers, including circuit connections, operational amplifier circuits, and special purpose circuits. (45 hrs lec & rec, 30 hrs lab) **Prerequisite: EPT 228**

EPT 245 Digital Electronics **3 Credits**
Explores digital logic circuits and devices. Following a review of necessary numbering systems (binary, octal, hexadecimal) the student will study and connect all basic gates, adders, counters, one-shots and multiplexers. This will culminate in a study of serial and parallel digital communications. (45 hrs lec & rec, 30 hrs lab)

EPT 251 Control Systems **3 Credits**
With an emphasis on applications and troubleshooting, this course introduces electromechanical and solid state control devices used in industrial control systems. Students will gain skills in the selection, design, and installation of circuits using relays, time delay relays, contactors, motor starters (NEMA and IEC), overload relays, pushbutton operators, selector switches, proximity switches, photoelectric sensors, and variable frequency drives. (15 hrs lec, 60 hrs labs) **Prerequisite: EPT 173**

EPT 296 Automation Projects I **3 Credits**
Topics may include integrating sensors and output devices with programmable automation controllers, instrumentation, process control, servo systems, building automation systems, and industrial robotics. Students may work with industrial products made by GE, Automation Direct, Allerton, AB, Emerson, and many others. Students will be required to complete a design project. (15 hrs. lec, 60 hrs. lab) **Prerequisite: EPT 176**

EPT 298 Automation Projects II **3 Credits**
Provides students with experience in high level function block/ladder logic PLC programming as well as HMI screen development. Students will design simulated automation systems using the latest release of the Rockwell Software Control Logix and Factory Talk View operator interface development software. In addition, this course will provide an opportunity for students to build an instructor selected automation related capstone project. (15 hrs lec, 60 hrs lab) **Prerequisite: EPT 296**

EPT 299 Selected Electrical Topics **2 Credits**
This course seeks to combine topics that are relevant to electrical and automation technology but do not fit into other courses or warrant a course of their own. Topics covered may include, but are not limited to, blueprint reading, AudoCadd, lighting design, wiring practices, conduit bending, overcurrent protection, computer networks, network cabling, and human machine interfaces. (60 hrs lec & rec) **Corequisite: Fourth semester status**

FIR 101 Firefighter I **3 Credits**
The purpose of this course is to prepare students for certification as Fire Fighter I (according to the professional standards described in NFPA 1001). The course will cover fire department organization and history, communications, incident command system, building construction, fire behavior, fire fighter safety and survival, use of equipment in

performing on-scene operations, equipment testing and maintenance, water supplies, pre-fire survey, inspections, incident reporting, fire prevention/public education, hazardous material awareness and terrorism/WMD awareness. Students will also complete CPR and First Aid Certification. At the end of the course, students will sit for the State of Maine FFI certification exam. (2 lec, 2 lab)

FIR 102 Firefighter II **3 Credits**

The purpose of this course is to prepare students for certification as Fire Fighter 2 (according to the professional standards described in NFPA 1001). The course content refreshes all the material covered in Firefighter I and extends the skills in SCBA use and interior attack. Additionally, FF2 students receive specific training in fire department organization and safety regulations, fire alarms and telecommunications, flammable gas firefighting, confined space rescue tunnels, industrial accidents, local hazards, trench rescue, high rise buildings, incident command, fire control: above/below grade, hidden, electrical, foam, sprinklers, investigation, inspection, preplanning, and auto extrication. (2 lec, 2 lab) **Prerequisite: FIR 101**

FIR 104 Emergency Telecommunicator – Basic **3 Credits**

This course is designed to prepare students for emergency telecommunicator duties to meet requirements of the NFPA 1061 Professional Qualification Standard for Public Safety Telecommunicator I; as well as meeting the State of Maine statutory requirement for those employed at public safety dispatch centers in Maine [25 MSRA § 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. Future public safety field responders will also gain a better appreciation and working knowledge for their relationship with their respective communications center. (3 lec)

FIR 105 Introduction to Emergency Services **3 Credits**

Designed to be an introductory course for the Fire Science Technology program. Presents a survey of emergency services, with emphasis on developing an awareness of history, organization, career options, expectations and study skills. Students will also spend time in this program learning about the physical and mental fitness needed to sustain a healthy career in public safety. Upon successful completion of this course, students will also earn two Certifications: ICS-100: Introduction to the Incident Command System and IS-700.A: National Incident Management System (NIMS) an Introduction. This course is recommended for students new to public safety. Preference is given to enrolled FIR/EMS students.

FIR 110 Fire Protection Systems **3 Credits**

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. (3 lec) **Preference to Fire Science majors.**

FIR 115 Fire Service Building Construction **3 Credits**
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 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. (3 lec) **Preference to Fire Science majors.**

FIR 127 Fire Science Learning Seminar **1 Credit**
Provides Fire Science Technology students with experiential learning opportunities in the field of fire protection. The student will serve at an area fire station and become a participating member of that department. The student will learn and practice job responsibilities in the functional area of fire suppression, fire prevention, equipment 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 and may be taken up to three times for credit. (1 lec) **Prerequisite: Fire Science Program Acceptance**

FIR 131 Fire Behavior and Combustion **3 Credits**
Explores the fundamental processes of combustion and the methods by which fires start, spread, and are controlled. (3 lec, 0 lab)

FIR 152 Fire Inspection and Prevention **3 Credits**
Provides fundamental knowledge relating to the field of Fire Prevention. Provides a demonstration of the basics of municipal fire inspection and code enforcement principles. Students will learn the organization and operation of a fire prevention office, the use and application of NFPA 101 Life Safety Codes and NFPA 1 Uniform Fire Code, to conduct reviews of building plans, to identify common hazards, and the basis for special inspections and fire investigations. (3 lec) **Preference to Fire Science majors**

FIR 155 Fire Service Hydraulics **3 Credits**
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. (3 lec) **Corequisite: MAT 113**

FIR 165 Wildlife Fire Management for Firefighters **3 Credits**
A study of wildland fire management methods and theories as related to structural fire suppression and protection crews. Included in this course of study are basic wildland firefighting terms and principles; fire, smoke, heat and weather behavior; types of fuels and topography and the effects of wildland fires upon civilian and structural protection decisions.

FIR 202 Hazardous Incident Management **3 Credits**
Presents an All-Hazards approach for incident response to and management of natural or man-made disasters, Bus Accidents, plane crashes, and other disasters with multiple patients, or release of chemical products. Evaluates the hazards of calls containing flammable materials, pressurized vessels, cryogenics, oxidizing agents, corrosives, explosive and toxic materials. Familiarizes students 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. Includes proper notification, proper jurisdiction of various state and federal agencies, and proper documentation and reporting. Concludes with presentations of semester-long student projects. **Prerequisite: 30 credits toward major**

FIR 207 Fire and Life Safety Educator **3 Credits**
Prepares the student to instruct others in positive aspects of Fire and Life Safety and Fire and Accident Prevention. Emphasizes basic learning characteristics of audiences, selection of appropriate instructional materials, appropriate delivery including active participation and involvement. Includes aspects of marketing and public notification, budgeting, planning, evaluation, and fund-raising. Also includes specialized training in Juvenile Fire-Setter Intervention and reporting. (3 lec) **Prerequisite: ENG 101**

FIR 210 Fire Service Instructor **3 Credits**
Designed to 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. (3 lec) **Prerequisite: 30 credits toward major**

FIR 215 Fire Service Leadership **3 Credits**
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 the 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. (3 lec) **Prerequisite: ENG 101**

FIR 221 Fire Investigation and Analysis **3 Credits**
Examines the underlying principles involved in fire origin and growth. Evaluates the effects of structural fire protection systems, building construction and furnishings, fire alarm and detection systems, special hazard suppression systems, and smoke management on the progress of fire growth. Examines the technical, investigative, legal, and social aspects of arson, including principles of incendiary fire analysis and detection, environmental and psychological factors of arson, legal considerations, intervention, and mitigation strategies. (3 lec) **Prerequisites: FIR 110, FIR 115**

FIR 250 Fire Ground Operations **3 Credits**
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 the scene of a fire. **Prerequisite: 30 credits toward major**

FIR 260 Fire Administration **3 Credits**
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 EMCC Fire Science learning outcomes. This course has been designated as a writing-intensive course. (3 lec) **Prerequisite: ENG 101**

FIR 291 Topics in Fire Science **3 Credits**
Focuses on a different topic in Fire Science each time it is offered and may be taken more than once for credit. Topics will be determined by the department. (3 lec)

FIT 231 Pipefitting Fundamentals **2 Credits**
Offers the student an introduction to pipefitting theory, nomenclature, materials, calculations, layout and templates. It offers the student the opportunity to develop skills necessary to successfully fit pipe including the safe use of hand and power tools, oxyfuel cutting equipment and pipe supports. Pipe preparation, fabrication, assembly and fitting are practiced with an emphasis on safety. 4-week course. (80 hr.) **Prerequisite: WEL 269**

FIT 233 Practical Pipefitting I **1.5 Credits**
Offers the student the opportunity to develop skills in pipefitting above ground including field measurements and the safe use of ladders, staging and rigging. Pipe hanger systems, salvage and disassembly will be examined and practiced. Assembly and salvage of socket welds will be introduced. An emphasis will be placed on working safely and collaboratively. 3-week course. (50 hr.) **Prerequisite: FIT 231**

FIT 235 Practical Pipefitting II **1.5 Credits**
Offers students the continued opportunity to develop skills in above ground piping with a focus on multiple and rolling offsets. Boiler tube and water wall fitting will be introduced. An emphasis will be placed on working safely and collaboratively. 3-week course. (50 hr.) **Prerequisite: FIT 233**

FWC 102 Basic Woodworking I **3 Credits**
Basic Woodworking I am an introduction to woodworking tools and equipment by examining the safe and skillful use of both hand and power tools, including their selection, purpose and maintenance. Designed to introduce the student to the safe and proper use of hand and layout tools used to construct basic woodworking joinery. Course emphasis will be the hands-on techniques necessary to produce several required wood joints and projects. 7-week course (3 lec, 14 lab)

FWC 103 Basic Woodworking II **4 Credits**
This course provides a comprehensive introduction to woodworking tools and equipment by continuing examining the safe and skillful use of both hand and advanced power tools, including their selection, purpose and maintenance. Students will learn the safe and proper use of hand and layout tools used to construct basic and intermediate level wood working joinery. Course emphasis will be the hands-on techniques necessary to produce required wood joints and projects. 8-week course (3 lec, 14 lab) **Prerequisite: FWC 102**

FWC 111 Woodworking **7 Credits**
This course offers a comprehensive presentation of woodworking tools and equipment. This course will foster the skillful use of hand and power tools, including their selection, purpose and associated maintenance. Designed to educate the student in the safe, proper techniques used to fabricate superior woodworking accomplishments. Course emphasis will include the hands-on techniques necessary to produce intricate wood joinery and undertake detail oriented projects. 15-week course (3 lec, 14 lab) **Prerequisite: FWC 103**

FWC 201 Basic Cabinetmaking and CNC **7 Credits**
Basic Cabinetmaking and CNC provides a comprehensive introduction into cabinetmaking. Students will design and fabricate traditional and 32mm stiles cabinets. Course will emphasize the use of industrial woodworking equipment including CNC Nesting Routing, Dovetails, and Edge-banding. Students will also be introduced to wood turning and laminating. 15-week course (3 lec,14 lab) **Prerequisite: FWC 111**

FWC 211 Advanced Cabinetmaking **7 Credits**
Advanced Cabinetmaking provides a continuation of basic cabinet making offering an extensive presentation of woodworking methods, practices and styles. This course is inclusive of the skillful use of hand tools, power tools and computer guided equipment. The safe selection, purpose, and associated maintenance of associated equipment will be incorporated. Course emphasis will include the techniques and guidance necessary to produce intricate wood joinery and undertake detail oriented projects. 15-week course (3 lec, 14 lab) **Prerequisite: FWC 201**

FYE 100 College Success Course **1 Credit**
Designed to empower students to achieve success in college and in life by learning highly effective research-based strategies that appeal to various learning preferences and by identifying resources that will help them be successful in college. Students focus on the eight On Course program principles: personal responsibility, self-motivation, self-management, interdependence, self-awareness, lifelong learning, emotional intelligence, and belief in oneself. (2 lab)

GEN 130 Employability Skills **1 Credit**
Designed to help students obtain employment and retain employment in their field upon completion of their program of study. Topics covered include effective job search techniques, completion of job application documents including application, resume, cover letter, references and thank you letter, interviewing techniques, work ethic, customer relations, and other on-the-job behaviors.

GEO 107 Geography **3 Credits**
General principles of human, physical, and cultural geography are explored. Topics include population, culture, political geography, issues of development, language, and globalization. How people shape their world and how people and place vary across the world. (3 lec)

GIS 230 Introduction to Geographic Information Systems **4 Credits**
Students will build an understanding of the fundamentals of a GIS through lecture, readings and computer activities. Students will learn to use a specific GIS software system, ArcGIS, to use a GPS receiver and to integrate data from GPS to GIS software, and to define and complete a GIS project using existing data. This computer-intensive course includes a detailed discussion and related computer activities on the following topics: basic geography and map concepts, what a GIS is, data sources, data quality, databases, data classification, vector and raster data, spatial analysis, project management, cartographic communication, metadata, projections, datum, coordinates, and ethics. (3 lec, 1 lab)

GOV 103 American Government **3 Credits**
Examines all aspects of American Government, including the historical interpretation of the U.S. Constitution and the development and function of the American governmental system. Aspects of the Executive, Judicial, and Legislative Branches and additional topics, such as the American Bureaucracy system as well as policymaking and the political process will be covered. This knowledge will be applied to the understanding of society and the role of government. (3 lec)

HIS 103 United States History to 1877 **3 Credits**
Explores the history of the United States from Exploration to 1877 and examines how various groups, events and actions shaped the United States. Through political, cultural, social and economic lenses, this course will cover a variety of topics: Native Americans, Colonization, the American Revolution, Republican Culture, Slavery, the Civil War and Reconstruction. Discussion of the major events affecting the United States from Exploration to 1877 will incorporate history from an all-inclusive perspective, giving voice not only to the powerful, but also the marginalized groups in U.S. history. (3 lec.)

HIS 104 United States History 1877 to Present **3 Credits**
Explores the history of the United States from 1877 to the present day. The course covers the political, social, and economic development of the U.S. (3 lec) *Replaces HIS101*

HIS 105 History of Science and Technology **3 Credits**
Focuses on science and technology from the American colonial period to the present, examining the social, political, and economic factors that have influenced science and technology development, and the impact of these developments on society. (3 lec)

HIS 106 Food in History **3 Credits**
Designed to focus on food as a way to examine both world and U.S. history. Particular emphasis will be placed on food and its connection with society. The history of control over food production, and the symbolic, cultural and religious importance of food in past and present day will be addressed. The impact of colonization, immigration and legislation are included as part of the course structure. (3 lec)

HIS 114 World History to 1700 **3 Credits**
Traces the development of the world from prehistory to roughly 1700; emphasis will be placed on the ideas, institutions and cultural heritage of civilization, as well as political events. Key themes are the political, philosophical and cultural legacies of ancient Greece and Rome; the origins and beliefs of Judaism, Christianity, and Islam; Medieval society and institutions; the Renaissance and Reformation; European exploration and colonization; the Scientific Revolution; and the Enlightenment. Through presentations, readings, simulations, and discussions, students will identify major historical trends and themes in world history related to the growing interdependence between world regions. This course addresses the social, economic, political and environmental facets of this increasingly inter-connected world. (3 lec)

HIS 115 World History 1700 to Present **3 Credits**
Traces the development of the world from 1700 to the interrelated global network of the present day. Through lectures, readings, and discussions, students will identify major historical trends and themes in world history related to the growing interdependence between world regions. This interaction was stimulated by European invasion and colonization, but also sustained by the contributions of non-western regions. This course addresses the social, economic, political and environmental facets of this increasingly inter-connected world. (3 lec) *Replaces HIS111*

HIS121 Maine History **3 Credits**
Examines the history and culture of Maine from pre-history to the present. The course will include the physical, political, cultural and economic development of the State and Maine's place in the United States and the world. (3 lec)

HIS 291 Special Topics in History **3 Credits**
Focuses on a different topic each time it is offered. Can be taken more than once.

HTM105 Principles of Hospitality **3 Credits**
Focuses on exploring careers in the hospitality industry, including the experience and training needed to succeed in the myriad of hospitality related career positions available. The history of the hospitality field, the future trends and the art of quality customer service as the core of overall success is discussed as well as practiced. (3 lec) ***Redesigned Course (will replace HTM103)***

HTM115 Lodging Management **3 Credits**
Introduces students to front-office operations and management. It also introduces successful strategies and operational tactics used by front-desk professionals for day-to-day operations, as well as employee management techniques that are important to the success of the front office. This is a certification course. (3 lec) ***New Course***

HTM133 Beverage Controls **3 Credits**
A dual certification course in which students are exposed to the identification, history, manufacture and use of malted beverages, wines and distilled spirits as well as to how, when, and where they relate to a beverage operation. Mixology, service etiquette and purchasing and control of a bar inventory as well as the legal, moral, and social obligations of service are also included. TIPs training is included (3 lec)

HTM142 Hospitality Law **3 Credits**
Designed to teach students to identify and understand the principles and concepts of laws impacting the hospitality industry. Provides an introduction to the court system and contracts and the legal rights of innkeepers and restaurateurs. The focus is on understanding risk, prevention of liability and protection against accidents, attitudes, and incidents that could lead to lawsuits. Case study and discussion examine the applications of law to the hospitality industry. (3 lec) ***New Course Number – Formerly HTM231)***

HTM152 Planning and Development in Tourism **3 Credits**
Explores tourism development as a process and the changing trends in tourism. Topics include history of tourism development; economic, environmental, social and cultural impacts of tourism; travel behavior and tourism marketing. Discussion of all factors that influence the hospitality, leisure, travel and recreation industries – interstate, intrastate and internationally. Emphasis is on guidelines and approaches in development of tourism that responds to national, regional and community needs and desires. (3 lec) ***(New Course Number – Formerly HTM251)***

HTM162 Meetings and Convention Management **3 Credits**
Exploration of the logistics involved in event planning. Students will discuss the wide spectrum of the convention market, examine the individual needs of people who plan and are part of the group function; those who review ways to service groups effectively. Special emphasis is places on the convention services department and manager. Topics include concept, design, feasibility, marketing, financial management, staging, staffing, safety and security, careers in this particular area of the hospitality industry, and how conference and event planning fits into the overall scope of the industry. (3 lec) ***(New Course Number – Formerly HTM261)***

HTM172 Hospitality Division Management **3 Credits**
Offers participants an understanding of the diverse areas that are commonly part of a hospitality business. The major areas involved in the training include the overseeing and hands-on management of the appointment of guest rooms, dining facilities, and food service areas as well as additional retail outlets. (1 lec, 4 lab) ***New Course***

HTM 201 Hospitality Management Internship 6 Credits
A paid internship position begins after the completion of the first academic year. Students explore a variety of career paths while working in the field. A portfolio will be required to fulfill the academic requirements of the course.

HUM 101 Introduction to Music and Art in Western Civilization 3 Credits
Seeks to develop in students an appreciation of the arts through the study of the great musicians and artists of the Western world. Key examples of music, painting, sculpture, and architecture from the Greeks to the present time will be examined. (3 lec)

HUM 103 Introduction to Art and Design in the 20th Century 3 Credits
Introduces Art and Design in the 20th Century. This course seeks to develop students' appreciation of art and design through the study of influential artists and designers in the 20th Century. Key examples of architects, industrial designers, painters and sculptors will be examined. Writing Intensive Course (3 lec)

HUS 101 Community Mental Health 3 Credits
Covers general topics in the field of community mental health at an introductory level. Emphasis is placed on basic healing theories and techniques, understanding and countering stigma, and medical aspects of mental illness. Professional behaviors are discussed and applicable law and policy is introduced.

HUS 110 Interviewing and Counseling 3 Credits
Provides an understanding of therapeutic relationships by focusing on the current interaction or interpersonal process that transpires between therapist and client. Theory and practice of psychological interviewing for the purposes of gathering data and/or modifying human behavior including current theories and techniques of counseling and psychotherapy. Includes experience with interviewing and counseling techniques and the proper use of referral.

HUS 120 Crisis Identification and Intervention 3 Credits
An introduction to crisis theories and an overview of various types of crises. Students will understand the prevalence and common effects of trauma, be able to identify risk factors for psychiatric disabilities, and understand counseling theories and human development across life span. Effective intervention skills and appropriate referral procedures are addressed from a crisis management perspective. Ethical, legal, and social issues will be discussed.

HUS 130 Psychosocial Rehab 3 Credits
Covers the history and practices of psychosocial rehabilitation. Emphasis is placed on person-centered and strength-based approaches, understanding of emotional and motor competence and the effects it places on goal attainment, an understanding of failure for success, how to conduct risk assessments and how individual choice is the cornerstone of the empowerment process. **Prerequisites: HUS 101, HUS 110, HUS 120 or instructor permission**

HUS 140 Understanding Diversity in Human Services **3 Credits**
Designed to promote understanding of social and cultural diversity through study of such issues and ethnicity, gender, race, socioeconomic status, religion/spirituality, sexual orientation, ability/disability, family structure, and geographic location. Emphasis will be placed on examining how one's own cultural identity impacts their beliefs, values and actions, and will learn skills for competent ethical practices with diverse populations in the human service community. **Prerequisites: HUS 101, HUS 110, HUS 120 or instructor permission**

HUS 210 Sexual Abuse, Trauma and Recovery **3 Credits**
Covers the topic of psychological trauma and recovery in the areas of sexual abuse, incest, physical abuse, severe neglect, and witnessing of such violence. Students will investigate the prevalence and common effects of trauma and be able to identify risk factors for psychiatric disabilities. Effective intervention skills and appropriate referral procedures will be addressed. **Prerequisites: HUS 101, HUS 110, HUS 120 or instructor permission**

HUS 220 Substance Abuse **3 Credits**
Provides an introduction to theoretical knowledge and skills necessary to provide human services to clients who have substance abuse issues. Emphasis is placed on evidence-based treatment for addictions, resources and the impact of stigma. History and contributions of the recovery movement are explored. Consideration is given to current trends, cultural context and primary prevention and intervention resources. **Prerequisites: HUS 101, HUS 110, HUS 120 or instructor permission**

HUS 230 Social Services for the Elderly **3 Credits**
Covers various aspects of aging as a developmental process in the areas of physical, cognitive, psychological and emotional, cultural/social, behavioral and environmental. Emphasis will be on the aging process and its impact on mental illness, will identify and evaluate current intervention strategies, including resources and mental health services for older adults. **Prerequisite: HUS 140 or instructor permission**

HUS 240 Case Management **3 Credits**
Covers topics in community integration, intensive case management, community treatment, skills and technique development, and family psycho-education. This course emphasizes development of a collaborative service plan, with goals and action steps that promote participation by individuals with psychiatric disabilities and their natural supports. **Prerequisite: HUS 140 or instructor permission**

HUS 250 Vocational Aspects of Disability **3 Credits**
Provides working knowledge of the national Consensus Statement on Mental Health Recovery and the ten fundamental components of recovery as they relate to employment. Emphasis will be placed on resources and roles of people involved in the employment support system for consumers with psychiatric disabilities, including job developers, job coaches and community work incentives coordinators, and the role of a MHRT/C in supporting an individual pursuing a vocational goal. **Prerequisite: HUS 140 or instructor permission**

HUS 291 Topics in Human Services **3 Credits**
Focuses on a different topic each time it is offered. Can be taken more than once.

ISA 101 Industrial Safety **3 Credits**
Teaches students to recognize, avoid, and prevent hazards in the workplace and includes information on individual rights to a safe, healthy work environment, in accordance with the U.S. Department of Labor. (3 lec)

KOR 101 Beginning Korean **3 Credits**
Designed for those who have no prior knowledge in Korean. Aims to teach students to perform appropriate spoken and written communication in most essential daily life situations. Focuses on mastering correct pronunciation, writing system, and basic vocabulary and grammar used in carrying out simple real-life tasks; students will learn how to speak, understand, read and write short sentences and paragraphs on concrete and familiar topics such as identity, school and classes, daily activities, past experiences and future plans. Introduces Korean culture essential for a better understanding of Korean language. (3 lec)

KOR 102 Beginning Korean II **3 Credits**
KOR 102 is the second half of the beginning level Korean, and is designed for those who have some prior knowledge in Korean. This course aims to train students to perform appropriate spoken and written communication in most essential daily life situations. This course will focus on mastering correct pronunciation, writing system, and basic vocabulary and grammar used in carrying out simple real-life tasks; students will learn how to speak, understand, read and write short sentences and paragraphs on concrete and familiar topics such as identity, school and classes, daily activities, past experiences and future plans. This course will also introduce Korean culture essential for a better understanding of Korean language. (3 lec) **Prerequisite: KOR 101 or instructor permission**

LAE 013 Introduction to Writing I **3 Credits**
Develops grammar, usage, and sentence structure skills at the paragraph and essay level, along with techniques of pre-writing, writing, and revising multiple drafts using the word processor and peer reading and editing. Students practice a variety of rhetorical patterns with emphasis on unity, support, coherence, and sentence skills. *Minimum grade of C to pass course.* (3 lec) **Placement: WR Accuplacer score ≤ 4**

LAE 010 Introduction to College English **6 Credits**
Develops the reading, writing, and information literacy skills needed for college work. Minimum Grade of C to pass course. (6 lec) **Placement: WR Accuplacer score ≤ 4**

LAE 041 Reading in Childhood Education **3 Credits**
Helps students build critical reading and study skills needed for college success. Introduces students to the field of childhood education and familiarizes students with essential vocabulary and introductory concepts within the educational field. Issues and trends in childhood education will be explored and integrated into reading, writing and critical thinking projects. *Minimum grade of C to pass the course.* (3 lec) **Placement: Appropriate scores on Accuplacer.**

LAE 042 Supported Study in Early Childhood and Education **1 Credit**
Helps students build skills in reading, writing, research and critical thinking in the fields of Early Childhood and Education. Introduces students to relevant vocabulary and concepts and provides assistance with assignment procedures. Supports students in acquiring the skills necessary to be successful with college level work. (1 lec)

LAM 008 Pre-Algebra **3 Credits**
Offers a one-semester review of whole number operations, fractions, decimals, percents, proportions, metrics, measurements, signed numbers, area, volume, algebraic expressions, and simple and linear equations. (3 lec) **Placement: AR Accuplacer score < 75. (Note: Some students may require multiple semesters of LAM 008 to acquire the knowledge for this level of achievement).**

LAM 009 Introductory Algebra **3 Credits**
Introduces students who may possess a strong background in arithmetic to some basic principles of algebra in preparation for more advanced coursework. Topics include signed numbers, algebraic expressions, equations and inequalities, polynomials, word problems, fractions graphing and factoring. (3 lec) **Placement: AR Accuplacer score > 75 and EA Accuplacer score <75 or successful completion of LAM 008 with grade of C or higher**

LAM 019 Accelerated Developmental Mathematics **3 Credits**
Designed for the student who has a strong arithmetic background but either needs a refresher in algebraic concepts or has no algebra experience. This course is focused primarily on the areas of deficiency in a student's math background and, at each individual student's pace, potentially allow students a college-level math course at the end of the semester. (3 lec) **Placement: AR Accuplacer score > 75 and EA Accuplacer score <75, MAT 113 or MAT 119**

LAS 099 Special Topics in College Learning **1 Credit**
Focuses on a different topic in college success each time it is offered and may be taken more than once for credit.

MAS 101 Introduction to Medical Assisting **1 Credit**
Presents a variety of topics pertinent to the Medical Assisting profession. Subjects covered will include the principles governing the release of information and the confidentiality of patient information; the laws, regulations, ethics and other standards affecting the management of health care and the principles of liability resting with the medical assistant professional; and an overview of the health care professional's role and responsibility.

MAS 111 Clinical Procedures I & Lab **4 Credits**
This course will introduce the medical assistant's role in obtaining patient histories, maintaining medical asepsis, assisting in physical exams for all of the medical specialties and in minor office surgery, collecting laboratory specimens, and performing vital signs. Students will develop an understanding of pathophysiology and prepare and implement

appropriate patient educational tools. (3 lec, 2 lab) **Prerequisites: BIO 121, MAS 101, BMT 113**

MAS 121 Medical Office Procedures **3 Credits**
Develops skills using computerized medical office programs to initiate and input patient data; includes scheduling appointments, filing insurance claims, recording patient information, managing accounts receivable and accounts payable; banking and processing payroll. (3 lec) **Prerequisite: BMT 113**

MAS 131 Math Methods for Medical Assistants **3 Credits**
Introduces students to the mathematics that have applications in the Medical Assisting profession. This course will include percents, proportions, measurement systems and conversion procedures, dosage calculations, graphing, charts and tables and an introduction to algebra. (3 lec) **Prerequisite: AR Accuplacer score ≥ 75**

MAS 201 Principles of Pharmacology **3 Credits**
Introduces the basic concepts of pharmacology. Major drug categories will be covered as they relate to the different body systems. The general principles of drug action, absorption, metabolism and excretion, as well as methods of administration will be introduced. This course will also cover mathematics and dosage calculations necessary for safe preparation and administration of medications. (3 lec) **Prerequisites: BIO 121, BIO 124, MAS 111, and BMT 113**

MAS 211 Clinical Procedures II & Lab **4 Credits**
This course will complete the clinical preparation of the coursework for Medical Assistants. The clinical competencies intended for this course include medication administration, specimen collection including phlebotomy, laboratory procedures, assisting with minor surgical procedures and medical emergencies, diagnostic procedures, and CPR. (3 lec, 2 lab) **Prerequisite: MAS 111**

MAS 221 Insurance Coding for the Medical Office **3 Credits**
Develops a basic understanding of procedural and diagnostic coding through use of CPT and ICD-10 Clinical Modification coding systems. Students will learn to process insurance claim forms while adhering to legal restrictions, and develop an understanding of the specific requirements for managed care systems including “Maine specific” insurance carriers. (3 lec) **Prerequisites: BIO 121, MAS 121, BMT 113**

MAS 231 Medical Assistant Externship **5 Credits**
This capstone course allows students to gain practical experience in providing clinical care to patients and performing administrative and clinical tasks that occur in a medical office. Students are given the opportunity to apply learned clinical, laboratory and administrative skills in a health care setting under professional supervision and to gain clinical proficiency. Students are required to complete a 160 hour unpaid, supervised practicum in a program approved health care setting. (1 lec, 160 hours). **Prerequisites: All MAS coursework and Program Director approval; CPR certification.**

MAS 232 Advanced Medical Assistant Externship **1 Credits**
Provides supplementary externship experience to second-year Medical Assisting students as they work to further develop clinical care and administrative skills in a medical office. Students are required to complete a 40 hour unpaid, supervised practicum in a program approved health care setting (1 lec, 40 hours). **Prerequisites: MAS231 and Program Director approval; CPR certification.**

MAT 101 Contemporary Math **3 Credits**
Designed to introduce the student to mathematics having applications in modern society. Topics will include social choice, apportionment, fair division, networks, circuits, planning and graphical solutions to linear programming. Additional topics may be drawn from statistics, coding, growth, symmetry, tilings and game theory. (3 lec) Prerequisites**: AR Accuplacer score ≥ 75, EA Accuplacer score ≥ 75**

MAT 103 Thinking Mathematically **3 Credits**
A semester exploration into critical thinking and problem solving. Topics will include elementary set theory, logic and basic theory of real numbers. (3 lec) **Prerequisites: AR Accuplacer score ≥ 75, EA Accuplacer score ≥ 75, or LAM 009 with a grade of C or higher.**

MAT 107 Elementary Descriptive Geometry **3 Credits**
Designed to prepare students to teach the geometry included in a modern NCTM STANDARDS based K-8 curriculum. Emphasis will be on geometric exploration activities, problem solving and informal deductive reasoning using many of the manipulatives used to teach geometric concepts in grades K-8. (3 lec) **Prerequisites: AR Accuplacer score ≥ 75, EA Accuplacer score ≥ 75**

MAT 108 Elementary Numerical Mathematics from a Modern Perspective **3 Credits**
Designed to prepare students to teach the non-geometric mathematics included in a modern NCTM STANDARDS based K-8 curriculum. Emphasis will be on the structure of arithmetic, development of good number sense, basic number theory, understanding probability and the use of descriptive statistics. Focuses on problem solving, and the development of arithmetic and algebraic reasoning skills. (3 lec) **Prerequisites: AR Accuplacer score ≥ 75, EA Accuplacer score ≥ 75**

MAT 113 Technical Mathematics I **3 Credits**
Emphasizes arithmetic review, ratio, proportion, variation, power of roots, percent, metric system, unit conversions, signed numbers, basic algebraic expressions, algebraic operations, simple equations, inequalities, applied plane and solid geometry review (perimeter, area, and volume), graphing, and right triangle trigonometry. (3 lec, 0 lab or 2 lec, 2 labs; or 1 lec, 4 lab) **Prerequisites: AR Accuplacer score ≥ 75, EA Accuplacer score ≥ 75**

MAT 114 Technical Mathematics II **3 Credits**
Emphasizes basic algebraic operations, factoring, algebraic fractions, exponents, radicals, scientific notation, quadratic equations, and logarithms, fundamentals of statistics, simultaneous linear equations, law of sines, cosine law, oblique triangles, vectors and radians. (3 lec, 0 lab) **Prerequisite: MAT 113 or MATL 113 with grade of C or higher**

MAT 119 College Algebra **3 Credits**
Builds a solid foundation in algebraic methods and techniques. Covers proportions, fundamental algebraic concepts and operations, linear equations and inequalities, absolute value, solving word problems, algebraic products and factoring, algebraic equations, graphs of functions, quadratic equations, determinants, systems of equations, exponents and radicals, log functions, and theory of equations. (3 lec) **Prerequisites: AR Accuplacer score ≥ 75, EA Accuplacer score ≥ 75 or LAM 009 with grade of C or higher**

MAT 120 College Trigonometry **3 Credits**
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, graphs of equations in polar coordinates and the trigonometric form of complex numbers including DeMoivre's Theorem. (3 lec) **Prerequisite: Grade of C or higher in MAT 119 or equivalent**

MAT 123 College Algebra and Trigonometry **4 Credits**
Covers variables and symbols, scientific notation, logarithms and applications, roots, rational exponents and complex numbers, formulas and literal equations, polynomials, products and factors, solving linear, quadratic and higher order equations, rational expression, solving inequalities, graphs of linear and quadratic functions, slope, intercepts and equations of lines, solving systems of equations, degree and radian angle measure, right angle trigonometry and its applications, trigonometric functions and their inverses, graphing trigonometric functions, solutions of oblique triangles, vectors, polar coordinates, graphs of equations in polar coordinates, and the trigonometric form of complex numbers including DeMoivre's Theorem. (4 lec) **Prerequisites: AR Accuplacer score ≥ 75, EA Accuplacer score ≥ 75**

MAT 160 Elementary Discrete Mathematics **3 Credits**
Designed to improve students' critical-thinking and problem solving skills and emphasizes topics related to computer science. Topics include logic and truth tables, set theory, functions, number systems, mathematical induction, algorithms, combinatorics, equivalence relations, recurrence relations, graph theory and trees. Additional topics may include error correcting codes, finite state automata, and encryption. (3 lec) **Prerequisites: MAT 119 and MAT 120 with grade of C or higher <u>or</u> MAT 123 with grade of C or higher, or equivalent**

MAT 161 Introduction to Statistics **3 Credits**
Introduces statistical theory including the nature of statistical methods, the manner of data collection and presentation, the rules of probability, frequency distributions, sampling distributions, estimation and hypothesis testing, regression and correlation. (3 lec) **Prerequisites: AR Accuplacer score ≥ 75, EA Accuplacer score ≥ 75**

MAT 217 Pre-Calculus **3 Credits**
Designed to deepen and broaden a student's mathematical expertise before tackling the rigors of calculus, this course covers progressions, the binomial theorem, theory of

polynomials with the Fundamental Theorem of Algebra, exponential and logarithmic functions, determinants, matrices, trigonometric identities, and fundamentals of plane analytic geometry. (3 lec, 0 lab) **Prerequisites: MAT 119 and 120 with grade of C or higher <u>or</u> MAT 123 with grade of C or higher, or equivalent**

MAT 225 Calculus I **4 Credits**
An introduction to calculus for students in mathematics, engineering, and the sciences. Covers the differential calculus of the algebraic, trigonometric, exponential and logarithmic functions, concluding with the definite integral and the fundamental theorem of calculus. The approach is intuitive and geometric, with emphasis on understanding the basic concepts of function, limit, derivative and integral. (4 lec, 0 lab). **Prerequisite: MAT 217 or equivalent with grade of C or higher**

MAT 226 Calculus II **4 Credits**
Completes the study of single-variable calculus. Topics covered include inverse trigonometric functions, hyperbolic functions, methods of integration, improper integrals, indeterminate forms, parametric equations, polar coordinates, and infinite series. (4 lec) **Prerequisite: MAT 225 with grade of C or higher**

MAT 227 Calculus III **4 Credits**
Topics include vector-valued functions, partial derivatives, multiple integrals, and the integration theorems of Green and Stokes. (4 lec) **Prerequisite: MAT 226 with grade of C or higher**

MAT 230 Introduction to Linear Algebra **3 Credits**
A course on matrix theory and linear algebra. Emphasis placed on topics useful in other disciplines, including systems of equations, vector spaces, determinants, eigenvalues, similarity, and positive definite matrices. (3 lec). **Prerequisite: MAT 227 with grade of C or higher**

MAT 235 Elementary Differential Equations **3 Credits**
An introduction to ordinary differential equations including first order differential equations, linear equations of higher order, power series methods, LaPlace transform, and applications. (3 lec) **Prerequisite: MAT 226 with grade of C or higher**

MATL 113 Technical Mathematics with Lab **3 Credits**
Emphasizes arithmetic review, ratio, proportion, variation, power of roots, percent, metric system, unit conversions, signed numbers, basic algebraic expressions, algebraic operations, simple equations, inequalities, applied plane and solid geometry review (perimeter, area, and volume), graphing, and right triangle trigonometry. (2 lec, 2 lab) **Prerequisites: AR Accuplacer score > 75, EA Accuplacer score < 75. <u>Note</u>: Credit cannot be awarded for both MATL 113 and MAT 113**

MRT 101 Basic Concepts of Radiography **1 Credit**
Introduces the student to the field of radiology as a profession. Topics such as the history of radiology, radiographic equipment, radiation exposure, and radiation safety are

discussed. A radiographer's role in the care of the patient is reviewed. A brief discussion of several radiographic procedures is provided. (1 lec)

MRT 111 Radiographic Positioning I **3 Credits**
Introduces radiographic positioning and describes in detail the routine positions required to demonstrate the chest, abdomen, extremities, and portions of the pelvic and shoulder girdle. The laboratory component provides the opportunity for students to radiograph the phantom and under simulated conditions, practice various procedures that have been presented in the classroom. (3 lec, 1 lab) **Prerequisite: Admission to the Medical Radiography program**

MRT 112 Radiographic Positioning II **3 Credits**
Describes in detail the routine positions required to demonstrate the spinal column, thoracic cage, portions of the pelvic girdle, and all parts of the skull. The laboratory component provides the opportunity for students to radiograph the phantom and under simulated conditions, practice various procedures that have been presented in the classroom. (3 lec, 1 lab) **Prerequisite: MRT 111**

MRT 117 Radiologic Procedures I **1 Credit**
Introduces procedures requiring the use of contrast media, fluoroscopy, and portable radiographic equipment. (1 lec, 0 lab) **Prerequisite: Admission to the Medical Radiography program**

MRT 118 Radiologic Procedures II **1 Credit**
Continues instruction in procedures requiring the use of contrast media and fluoroscopy and introduces specialized radiographic examinations. (1 lec, 0 lab) **Prerequisite: MRT 117**

MRT 119 Imaging Modalities **1 Credit**
Acquaints current radiography students with modalities other than diagnostic imaging. Topics include, but are not limited to, sonography, nuclear medicine, radiation oncology, and magnetic resonance imaging (MRI). (1 lec) **Pre or Corequisites: BIO 121/122, Admission to the Medical Radiography program**

MRT 121 Principles of Radiographic Exposure I **2 Credits**
Provides the student with a thorough understanding of the theory of x-ray production, x-ray interactions within tissue, selection of technical factors, and correlates this knowledge with practical application. (2 lec) **Prerequisite: Admission to the Medical Radiography program**

MRT 122 Principles of Radiographic Exposure II **2 Credits**
Expands on the variables that affect the radiographic image. Understanding of these critical factors allows for adaptation for procedures involving pediatric patients, mobile radiography patients, and atypical adult patients. The student will also develop knowledge of digital imaging. (2 lec) **Prerequisite: MRT 121**

MRT 131 Medical Terminology **1 Credit**
Presents a general study of medical terminology, focusing on definition by analysis of components. (1 lec)

MRT 151 Introduction to Health Care **2 Credits**
Discusses the radiographer's role in caring for the needs of the ill or injured patient undergoing radiographic examination. Acquaints the student with the principles of medical ethics and the responsibilities of the allied health professional. Introduces body mechanics, medical aseptic technique, first aid, observation of vital signs, management of medical emergencies in the radiology department, and basic care of special and surgical patients. (2 lec) **Prerequisite: Admission to the Medical Radiography program**

MRT 161 Clinical Education I **5 Credits**
Introduces students to the clinical area. The lecture portion of the course acquaints students with hospital, department, and program policies and procedures, as well as familiarizes them with image evaluation, and provides basic instruction in radiation protection. The clinical portion acquaints the student with room preparation, body mechanics, patient positioning, radiographic procedures, imaging processing, and interaction with patients. Students begin the semester by observing procedures and assisting the radiographer with aspects of the procedure that have been presented in the classroom. Clinical rotations correlate with didactic education and focus on basic procedures involving radiographic positioning of the chest, abdomen and extremities; basic bedside radiography; fluoroscopy; body mechanics; medical ethics and patient care; image processing; departmental record-keeping; and medical computer usage. Students are exposed to the operating room to introduce them to radiography in a sterile environment. Students begin competency testing on basic procedures such as chest, abdomen, hand, and wrist. (2 lec, 14 lab) **Prerequisite: Admission to Medical Radiography program**

MRT 162 Clinical Education II **5 Credits**
Encourages students to take a more active role in basic radiographic procedures, emphasizing technique-selection, radiographic positioning, explanation of procedures to the patients, and clerical tasks associated with radiography. Students begin taking a participatory role in operating room procedures and neonatal special care radiography. The scope of procedures expands to include the thoracic cage, pelvic girdle, spine, and all parts of the skull. In fluoroscopy assignments, students take a more active role in gastrointestinal and barium enema procedures, and expand their participation in procedures such as myelography, cystography, arthrography, and endoscopic studies. Students continue competency testing in basic procedures such as stretcher chest, pediatric chest, extremities, pelvis and lumbar spine. To verify continued competency, students are retested over a competency exam successfully passed the previous semester. (1 lec, 15 lab) **Prerequisites: MRT 111, MRT 117, MRT 121, MRT 161; Pre <u>or</u> Corequisite: MRT 131 or BMT 113**

MRT 163 Clinical Education III **5 Credits**
Allows students to continue gaining proficiency in procedures and positions, and gives them the opportunity to put into practice radiographic exposure principles presented in

the first two semesters of the program. The scope of the procedures expands to include cranial and trauma radiography, and procedures performed on the panorex unit. A Carm inservice is presented, and students continue supervised participation in surgical and non-surgical procedures. Students perform competency testing in procedures such as hip, forearm/elbow, shoulder, lower leg, erect and decub abdomen, c-spine or t-spine, digital fluoro, and UGI series. To verify continued competency, students are "retested" over two competency exams successfully passed in previous semesters. (2 lec, 38 lab) **Prerequisites: BIO 122, MRT 112, MRT 118, MRT 122, MRT 162**

MRT 164 Advanced Clinical Education II **1 Credit**
Provides supplementary clinical experience to motivated first-year radiography students as they begin taking a more active role in radiographic procedures. This course may be taken multiple times for credit. (0 lec, 4 lab) **Prerequisites: MRT 111, MRT 117, MRT 121, MRT 151, MRT 161; Corequisite: MRT 162 or MRT 163**

MRT 211 Radiographic Positioning III **1 Credit**
Expands on MRT 111, Radiographic Positioning I, with emphasis on analysis and comparison of various positions and on positioning of non-routine and trauma views. (1 lec) **Prerequisite: MRT 111**

MRT 212 Radiographic Positioning IV **1 Credit**
Expands on MRT112, Radiographic Positioning II, with emphasis on analysis and comparison of various positions, and on positioning of non-routine and trauma views. (1 lec) **Prerequisites: MRT 112, MRT 117**

MRT 222 Principles of Imaging Physics **1 Credit**
Reviews the basic exposure principles presented in the first year of the program and emphasizes the practical applications of these principles. This course expands student knowledge of radiographic equipment as it relates to fluoroscopic imaging. This course acquaints students with quality assurance within the radiography department. (1 lec, 1 lab) **Prerequisites: MRT 122; Pre <u>or</u> Corequisite: PHY 235**

MRT 230 Radiology Review & Career Planning **1 Credit**
Prepares the senior radiography student to enter the field of radiology as a profession. Topics such as test taking strategies, resume writing, job applications and interviews are briefly discussed. Several Mock Registry Exams will be administered and reviewed with students in preparation for the American Registry for Radiologic Technologists (ARRT) Certification Examination. (1 lec) **Prerequisites: MRT 119, MRT 122, MRT 211, MRT 251, MRT 255, BIO 272; Corequisites: MRT 212, MRT 222, PHY 235 or instructor permission**

MRT 251 Advanced Health Care **1 Credit**
Provides students with advanced patient care methods. Focuses on drug administration and phlebotomy, EKG testing, and emergency medical care for trauma patients. A review of medical ethics is discussed. (1 lec) **Prerequisite: MRT 151**

MRT 255 Pathology **1 Credit**
Explores physiological changes which occur as the result of disease and injury. Focuses on the radiographic manifestations of such changes and discusses the importance of those skills required to produce radiographs which demonstrate the disease or injury. (1 lec) **Prerequisites: BIO 122, MRT 112**

MRT 264 Advanced Clinical Education V **1 Credit**
Provides supplementary clinical experience to motivated second-year radiography students as they work on skill refinement of routine procedures and radiography of the atypical patient. **This course may be taken multiple times for credit.** (4 lab) **Prerequisites: MRT 119, MRT 211, MRT 251, MRT 255, MRT 261; Corequisite: MRT 265 or MRT 267**

MRT 267 Clinical Education IV **7 Credits**
Advances students into areas of less direct supervision and more independent performance, based upon demonstration of competence. Emphasis is placed on refinement of skills in routine areas and on involvement in non-routine procedures and situations, with students being expected to offer proposals for compensatory measures. After course instruction in related imaging modalities (MRT 119 Imaging Modalities), students begin clinical rotations through those areas. Competency testing continues on procedures such as humerus; patella knee views; trauma shoulder, hip and extremity; portable abdomen, extremity, and pediatric chest; c-spine or t-spine; small bowel and barium enema series; and headwork exams of panorex mandible, facial bones and orbits. To verify competency, students are "retested" over two competency exams successfully passed in previous semesters. (0 lec, 27 lab) **Prerequisite: MRT 163**

MRT 270 Clinical Education V **7 Credits**
Allows students to work on skills refinement of routine procedures and provides increased participation in radiography of the atypical patient. Students continue rotations in related imaging modalities. Competency testing continues on procedures such as trauma extremity, c-spine and a multiple trauma procedure; surgical spine and extremity; c-arm procedures; mandible, skull and sinuses; ribs and femur; vital signs and venipuncture. To verify continued competency, students are "retested" over two competency exams successfully passed in previous semesters. (35 lab) **Prerequisites: MRT 119, MRT 251, MRT 255, MRT 267**

MRT 290 Patient Care **1 credit**
Independent review of patient care and legal issues in radiography. Reacquaints the student with the principles of medical ethics and the responsibilities of the allied health professional. Review of body mechanics, medical aseptic technique, first aid, observation of vital signs, management of medical emergencies in the radiology department, and basic care of special and surgical patients. Other topics covered are drug administration, phlebotomy, EKG testing, and emergency medical care for trauma patients.

MRT 291 Radiation Safety **1 credit**
Independent review of the interaction of radiation within living systems, and radiation effects on molecules, cells, tissues and the body as a whole. Factors affecting biological

response are reviewed, including somatic and genetic effects of radiation exposure. Radiation protection principles are presented including federal and state health and safety requirements; radiation safe practices for patients, personnel and the public; dose limits and personnel monitoring. Other topics covered include measurements of matter and energy; mechanical and electrical work, power, and energy; DC and AC circuits; x-ray machine circuitry; and photon/matter interactions**.**

MRT 292 Image Production **2 credits**
Independent review of the theory of x-ray production, x-ray interactions within tissue, selection of technical factors, image evaluation, and digital imaging. Other topics covered include fluoroscopy, image production, the variables that affect the radiographic image and quality assurance.

MRT 293 Procedures **2 credits**
Independent review of radiographic positioning and the positions required to demonstrate the chest, abdomen, extremities, pelvic and shoulder girdles, spinal column, thoracic cage and skull. Other topics covered include contrast media, fluoroscopy, portable radiography and specialized radiographic examinations.

MRT 294 Clinical Education I **10 credits**
Allows students to work on skills refinement of routine procedures and provides participation in radiography of the atypical patient. Competency testing will be completed on all procedures required by the ARRT and EMCC Medical Radiography Program.

MRT 295 Clinical Education II **5 credits**
Allows students to continue to work on skills refinement of routine procedures and provides participation in radiography of the atypical patient. Competency testing will be completed on all procedures required by the ARRT and EMCC Medical Radiography Program.

MUS 123 Understanding Music **3 Credits**
Introduces students to the fundamentals of music theory, history, and composition by examining how music was and is composed through a variety of historical periods. Will include a study of major composers and musical works from the Middle Ages to today. Will fulfill the general education requirement for an elective 100 level course in Humanities. (3 lec)

NRG 101 Math for Nurses **3 Credits**
Introduces math concepts that are used in nursing to pre-nursing students. Topics include dosage calculations, IV drip calculations, medication label reading,syringe and medicine cup measurements. Math concepts utilized include (but are not limited to) addition, subtraction, multiplication, division, decimals, fractions, conversion between metric and standard units of measurement, and algebra. Dimensional analysis is utilized to help the student solve dosage calculation problems. **This course is a prerequisite to the Nursing program. Prerequisite: AR Accuplacer score ≥ 75**

NUR 105 Foundations of Nursing **8 Credits**
Introduces the role of the nurse as a member of the health care team. Student learning focuses on the nursing process as it addresses basic human needs, and stresses the impact of culture, values and beliefs, and internal and external stressors on health and illness. Principles of nutrition, communication, pharmacology, and teaching-learning are integrated. Selected clinical experiences expand upon laboratory learning of basic nursing skills. (5 lec, 9 clinical) **Prerequisites: Admission to Nursing program**; **BIO 121, BIO 124; Corequisites: BIO 122, BIO 126, BIO 251, PSY 101**

NUR 136 Nursing Across the Lifespan I **10 Credits**
Provides the knowledge and skills necessary to care for individuals experiencing alterations in meeting their basic human needs as they relate to medical-surgical system alterations and mental health issues. Students use a family centered approach in caring for individuals across the lifespan and explore preventive maintenance and restorative nursing interventions within the nursing process framework. This course applies basic knowledge learned in NUR 105, Foundations of Nursing, along with nutrition, pharmacology, communication skills, psychology and teaching learning principles. Classroom content correlates with selected learning experiences in structured health care settings. (6 lec, 12 clinical) **Prerequisites: NUR 105, BIO 122, BIO 126, and BIO 251, PSY 101; Corequisites: BIO 222, ENG 101, PSY 231**

NUR 267 Nursing Across the Lifespan II **8 Credits**
Prepares the nursing student to function as an effective nurse generalist using a family-centered approach to health care. Emphasizes the collaborative care and management of patients with a focus on neurological, cardiovascular, maternal-newborn, and pediatric nursing. Uses the nursing process and critical reasoning to guide therapeutic nursing interventions. Principles of nutrition, communication, pharmacology, and teaching-learning are integrated. Provides correlative clinical and laboratory experiences that enable students to apply theory and perform skills under supervision of nursing faculty in acute care settings. (4 lec, 12 clinical) **Prerequisites: BIO 222, ENG 101, NUR 136, PSY 231; Corequisites: NUR 281, BIO 216, SPE 101**

NUR 270 Nursing Across the Lifespan III **8 Credits**
Builds on previous theoretical and clinical learning experiences while increasing the student's knowledge and responsibility in the care of clients with multiple and complex health issues, including the nurse's role and responsibility in emergency and disaster situations. End of life care and chronic disease management is included. This course includes didactic and case study classroom work. Clinical experiences include supervised advanced clinical medical/surgical skills, a partnership experience, and practice of management skills in health care facilities. At the completion of this course, students are able to provide and manage comprehensive care in a variety of clinical settings. (4 lec, 12 clinical) **Prerequisites: NUR 267, NUR 281, BIO 216, SPE 101; Corequisite: NUR 282**

NUR 281 Professional Issues I **1 Credit**
This advanced nursing course is an introduction to the professional issues of nursing leadership and management. The nursing roles of leader, manager, educator, clinician, researcher and mentor will be explored. Students will use computer technologies to

enhance the development of project management skills. Teaching methods include case study reviews, lecture, group discussions and project development and simulations. (1 lec) **Prerequisites: NUR 136, PSY 231, ENG 101; Corequisite: NUR 267**

NUR 282 Professional Issues II **1 Credit**
Continuing with the themes explores in **NUR 281** and expanding the practice framework, this course focuses on the entry into professional nursing and role transition. Emphasis is on nurse's role as a member of the healthcare team in ethical-legal issues in professional practice, including safety, delegation, and prioritization; and political-economic issues. (1 lec) **Prerequisites: NUR 267, NUR 281, BIO 216, SPE 101; Corequisite: NUR 270**

NUT 101 Nutrition **3 Credits**
Involves a fundamental understanding of nutrition, digestion, the basic principles and practice of nutrition as a science and how it is applied. Identification of essential nutrients and their functions as well as their relationship in promoting health and preventing disease at the different stages of life will be addressed.

NUT 221 Nutrition **4 Credits**
Through a combination of lecture, class discussions, cooking labs and project presentations, students will learn the role of nutrition in culinary arts. (3 lec, 2 lab)

ORT 105 Introduction to Outdoor Skills **3 Credits**
Introduces knowledge and skills required for overnight backpacking and canoeing trips. Students will plan, organize, and participate in a series of wilderness trips lasting from 2 to 8 days. Topics include: personal and group equipment selection, care and repair; campsite selection and set-up; stove use and campfire use; Leave No Trace principles; hiking and backpacking; canoe camping; weather interpretation; useful knots; meal planning and cooking; navigation and route finding skills; river crossing; bear camping; basic risk management and emergency procedures. Overnight outings are a required component of the course. Students must be in excellent physical condition. (15 lec, 60 lab)

ORT 106 Introduction to Winter Outdoor Skills **3 Credits**
Provides knowledge and skills required for winter backcountry travel and extended winter overnight camping. In addition to lecture, students will plan and participate in a series of wilderness trips lasting from 2 to 8 days. Topics include: personal and group winter equipment selection, thermoregulation and energy conservation techniques; winter traveling and camping skills, winter Leave No Trace principles; risk management strategies in winter environment, snowshoes and/or backcountry ski traveling techniques, building snow shelters, building and using a snow sled. Students will be expected to conduct additional research and present information on such topics as cold weather injuries, winter natural history, meteorology, etc. Students are required to provide proper clothing for winter backcountry travel. Requires one or more multi-night backcountry trips in order to apply skills in a real-time environment. Students must be in excellent physical condition and able to easily travel at least 5 miles per day on a trail with a 35-pound backpack. (15 lec, 60 lab) **Prerequisite: ORT 105 or instructor permission**

ORT 112 Outdoor Leadership and Guiding 3 Credits
Introduces the principles and practices of professional outdoor leadership and guiding. Students will develop a strong foundation for providing high quality outdoor experiences for clients. Explores the history of outdoor leadership and the development of professional guiding. Students will learn about group dynamics, learning process, educational delivery, insurance and legal necessities, client care, and risk management as they apply to leading outdoor trips. A major emphasis is on the development of teaching curriculum for core skills such as camp set up, Leave No Trace, navigation, meal preparation, and emergency procedures. Requires multiple multi-night backcountry trips in order to apply skills in a real-time environment. Students must be in excellent physical condition and able to easily travel at least 5 miles per day on a summer trail with a 35-pound backpack. (12 lec, 66 lab) **Prerequisite: ORT 105**

ORT 141 Wilderness First Responder 4 Credits
Provides the knowledge and skills necessary to deal with medical and traumatic emergencies in remote settings. Topics include patient assessment, difficult extrication and patient movement, basic search and rescue, emergency childbirth, allergies (includes anaphylaxis certification), toxins, burns, wounds, fractures, dislocations, shock, spinal assessment and management, brain/head injuries, respiratory distress, heat and cold injuries, BLS CPR, legal issues and treatment of common backcountry ailments such as lost fillings, fish hook removal, fever, etc. Most importantly, students improve critical thinking skills in medicine. Additional certification fee required. (45 lec, 30 lab)

ORT 151 Specialized Outdoor Pursuits: Rock Climbing I 2 Credits
Introduces the sport of rock climbing as it relates to top rope rock climbing: equipment, fundamentals of climbing movement, harness and knot applications, basic belaying and rappelling and anchor establishment. The primary goals are to build a solid foundation of basic climbing skills to allowing one to begin top rope climbing independently and to become a competent partner to a more experienced climber. Additional presentation and research will focus on climbing history, current issues in climbing, equipment development and service within the local climbing community. The format of this course is primarily field based "hands-on" learning with the emphasis upon student interaction and practical skill development. (4 lec, 52 lab)

ORT 152 Specialized Outdoor Pursuits: Introduction to Whitewater Canoeing 2 Credits
Introduction to the sport of white water canoeing. This course covers the fundamentals of moving and white water canoeing, the basic strokes, maneuvers, and river reading and strategy. Discussion and projects will focus upon current issues in paddling, equipment development, and sport specific training. (12 lec, 36 lab)

ORT 153 Specialized Outdoor Pursuits: Winter Mountaineering 2 Credits
Introduces the skills required to begin ice climbing and winter mountaineering. Topics include a review of basic climbing technical skills such as knots, belaying and rappelling; use of crampons, ice axes and ice/snow protection; self-arrest and self-belay; snow and ice climbing and roped travel techniques; avalanche awareness and rescue; cold weather travel and camping, and risk management skills. The course includes winter camping and travel in an alpine area. Primarily a field skills course,

additional assignments may focus on concepts essential to safe and responsible mountaineering. (5 lec, 50 lab) **Prerequisites: ORT 106 and ORT 151 or instructor permission**

ORT 161 Lifestyle Endeavors: Nordic Skiing 2 Credits
An introduction to classic Nordic (cross country) skiing, including an explanation of techniques, equipment, and safety considerations. Upon completion students should have the basic motor skills and knowledge to safely enjoy the sport of cross-country skiing on their own. (3 lec, 24 lab)

ORT 162 Lifestyle Endeavors: Introduction to Whitewater Kayaking 1 Credit
Introduction to the sport of white water kayaking. This course covers the fundamentals of moving and white water kayaking, the basic strokes, maneuvers, rolling, and river reading and strategy. Discussion and projects will focus upon current issues in paddling, equipment development, and sport specific training. (0 lec, 30 lab)

ORT 163 Lifestyle Endeavors: Climbing Wall Instructor 1 Credit
Provides an in-depth understanding equipment and methods to teach climbing in a climbing wall setting. Develops risk assessment and risk management expertise, basic problem solving abilities such as belay transitions, and on wall coaching techniques and reinforces the importance of teaching technically accurate Information and debunks many common climbing myths. Participants will be assessed on both their core knowledge and their ability to effectively teach and coach related skills. Upon successful completion students will receive either a Climbing Wall Instructor Assistant, Climbing Wall Instructor, or Lead Climbing Wall Instructor and meet the national standards of the Professional Climbing Instructor Association. (5 lec, 20 lab) **Prerequisite: ORT 105 with grade of B or higher or instructor permission**

ORT 201 Outdoor Program Management 3 Credits
Covers several major aspects of program administration including: outdoor education history, budgeting, hiring and staffing practices, training, safety and risk management, land management and permits, record-keeping, accreditation and certification, and marketing strategies. Students will complete a variety of personal research and activity projects. (42 lec, 6 lab)

ORT 202 Customer Service and Marketing in Outdoor Recreation 3 Credits
Presents the key concepts of customer service and marketing in outdoor recreation. Discussion will focus on defining customer service, identifying customer service challenges and solutions, responding and communicating effectively with customers through different media. Examines key areas of written and electronic marketing using a combination of in-class exercises, real world examples, cases, lecture, and discussion. (45 lec, 0 lab)

ORT 211 Principles of Search and Rescue 2 Credits
An introduction to the fundamentals of remote search and rescue methods. Meets the standards of many state and federal basic SAR training expectations and includes Maine Search and Rescue Association certification. Topics include: preparing for search, search

orchestration and management, clue detection, navigation, search safety, litter packaging, personal access rope skills, low angle litter lowering and mechanical advantage raising systems and team briefing/debriefing. (15 lec, 30 lab)

ORT 221 Recreational Maine Guide Preparation 1 Credit
Prepares individuals to take the State of Maine Recreation Guide Exam. Includes the history and practice of professional guiding in Maine and develops a strong foundation for providing safe high quality outdoor experiences for clients. Includes land navigations skills, lost person management, basic canoeing skills, canoe rescue, a first aid review, meal planning, group safety and guiding regulations. (12 lec, 6 lab) **Prerequisite: ORT 105 or instructor permission**

ORT 222 Field Internship in Outdoor Recreation 3 Credits
A practical application of skills formally learned in courses throughout the Outdoor Recreation program curriculum. Students are required to research, apply for, and secure an internship of at least 280 hours with an outdoor recreation organization or company. Internship must be approved by the student's advisor. Students will be required to maintain a journal/time log and write a summary of their learning experience.

ORT 231 Planning and Design of Park and Natural Area Infrastructure 3 Credit
Introduces students to planning practices for wildland recreation. Focuses on planning process, identifying issues, planning criteria, goals and objectives, developing and analyzing alternatives, implementation and evaluation of plans. Environmental impacts will be explored along with methods to mitigate impact. (45 lec, 0 lab)

ORT 233 Planning and Design Field Skills 2 Credits
Prepares individuals to take the State of Maine Recreation Guide Exam. Includes the history and practice of professional guiding in Maine and develops a strong foundation for providing safe high quality outdoor experiences for clients. Includes land navigations skills, lost person management, basic canoeing skills, canoe rescue, a first aid review, meal planning, group safety and guiding regulations. (9 lec, 42 lab)

ORT 241 Use of Mechanized Tools in Outdoor Recreation 1 Credit
Students are prepared to safely use and provide field maintenance for a variety of powered equipment commonly used in outdoor recreation operations. Exposes students to use and care of snowmobiles, ATVs, motorboats, canoe and utility trailers and motor boats. The format of this course is primarily field based "hands-on" learning with the emphasis upon student interaction and practical skill development. (0 lec, 30 lab)

PHI 101 Ethics 3 Credits
Focuses on justifiable parameters for making ethical decisions. Introduces the history of ethical thinking and decision making. Utilizes case study and team format to explore and discuss ethical thinking and choosing. Provides a three-part framework for critical thinking and choosing when faced with ethical dilemmas. (3 lec)

PHI 105 Comparative World Religions **3 Credits**
Introduces major religions of the world with a view of their theological perspectives and their mythologies, and their history and relationships to one another. Discusses religions' impact on the global community as well as their role in the lives of the faithful. Religions included in the course are animism, ancestor worship, nature faiths to the regions of the Indus Valley, Hinduism, Buddhism, Sikhism, Jainism, Judaism, Christianity, and Islam. (3 lec)

PHI 111 Wilderness Ethics **3 Credits**
Exposes students to the complexity of differing values related to wilderness and the concepts of wilderness preservation. It explores the meaning of wilderness and its importance to society through the eyes of major authors such as Leopold, Waterman and Nash. Wilderness ethics encourages discussion focused on the central question of wilderness preservation for the benefit of people or the benefit of nature and to what extent can or should these be intermingled. The course examines the historical development of the Leave No Trace ethic and the Wilderness Act along with implications of revisions to the landmark act. It further explores local issues that directly impact the future of wilderness areas in Maine and local economies. (45 lec)

PHI 291 Topics in Philosophy **3 Credits**
Focuses on a different topic each time it is offered. Can be taken more than once. (3 lec)

PHY 108 Survey of Applied Physics **4 Credits**
This is a one-semester overview of general physics. Major topics include mechanics, energy and motion, simple machines, fluid flow, temperature and thermal expansion, electricity and magnetism. This is a laboratory course emphasizing hands-on learning and problem solving techniques. (3 lec, 2 lab) **Prerequisite: MAT 113 or MAT 119 with grade of C or higher or instructor permission**

PHY 109 Concepts in Physics **4 Credits**
Emphasizing concepts, this course consists of a Newtonian core following by modern post-Newtonian ideas and societal issues. Demonstrations and laboratory exercises are integrated with traditional lecture/discussion, outside readings, and homework. This course satisfies a general education laboratory science requirement. (3 lec, 2 lab)

PHY 118 Independent Study in Physics **1 Credit**
An independent study. Topics covered will be material not included in PHY 108. Course is a supplement to the PHY 108 course that will allow students with a particular interest to go beyond the topics covered in the PHY 108 course. Topics included: light and optics.

PHY 121 Physics I **3 Credits**
The first of a two-semester sequence, this course stresses the qualitative and quantitative aspects of vector analysis, kinematics, dynamics, energy concepts, and includes an introduction to thermodynamics. Particular topics include projectile motion, circular motion, simple machines, thermal properties of matter, and heat transfer. (3 lec, 0 lab) **Prerequisites: A functional knowledge of algebra and trigonometry is**

required. This may be demonstrated by a grade of C or higher MAT 114; a grade of C or higher in MAT 120; or by instructor permission. Corequisite: PHY 122

PHY 122 Physics I Laboratory **1 Credit**
Reinforces topics covered in PHY 121, Physics I. (2 lab) **Corequisite: PHY 121**

PHY 123 Physics II **3 Credits**
The second of a two-semester sequence, this course stresses the qualitative and quantitative aspects of vibrations and waves, electricity and magnetism, and early quantum theory. Particular topics include mechanical waves, sound, light, optics, DC and AC circuits and basic atomic structure. (3 lec) **Prerequisite: PHY 121 with grade of C or higher; Corequisite: PHY 124**

PHY 124 Physics II Laboratory **1 Credit**
Reinforces topics covered in **PHY 123, Physics II**. (2 lab) **Corequisite: PHY 123**

PHY 235 Radiologic Physics **3 Credits**
Encompasses an overview of classical physics plus a number of topics specifically directed to the radiographic technician. Topics will include measurements of matter and energy; mechanical and electrical work, power, and energy; DC and AC circuits; x-ray machine circuitry; and photon/matter interactions**. Prerequisites: MAT 119 and High School Physics <u>or</u> PHY 108 with grade of C or higher**

PLG 101 Plumbing Technology I **6 credits**
Introduces students to the Maine State Unified Plumbing Code Chapters 1-6 and the fundamentals of residential and light commercial plumbing emphasizing safety, plumbing math and measuring, soldering copper tubing, and fitting allowances.

PLG 102 Plumbing Technology II **6 credits**
Continues the Maine State Unified Plumbing Code Chapters 7-16 in preparation for the Maine State Journeyman's Plumbing Exam. Topics include fitting identification and use drainage and venting, cast iron and no-hub piping and fittings, and blueprint reading and layout. **Prerequisites: PLG 101 and PLG 111**

PLG 111 Plumbing Technology Laboratory I **3 credits**
Applies theories gained in PLG101 adding the assembly, placement and connection of a variety of fixtures, appliances, and water taps. Other applications include various hot water sources and maintenance protocols, water piping and distribution, water heaters/piping, Pex tubing/piping, fitting identification, and piping materials connection options. **Corequisite PLG 101**

PLG 112 Plumbing Technology Laboratory II **3 credits**
Applies theories and skills gained in PLG 102 and PLG 111 building more advanced and complex installations including practical drainage, venting and water distribution projects, black iron pipe threading and safety thread machine, threading projects, and license requirements and responsibilities. **Corequisite: PLG 102**

PSY 101 Introduction to Psychology **3 Credits**
Introduces the major areas of contemporary psychology, including research methods, physiological psychology, perception, consciousness, learning, development, intelligence, and abnormal behavior. (3 lec)

PSY 211 Human Relations **3 Credits**
Provides skills-based training, focusing on assertiveness, empathic listening and responding, sending and receiving clear messages, flexing to different styles, adapting tasks to include motivational strategies, praising and critiquing, transactional analysis, and effectively dealing with defense mechanisms and groupthink. (3 lec)

PSY 214 Teams - Principles and Practices **3 Credits**
Explores and applies the psychological and practical applications of team building principles. Also examines current concepts in leadership skills as applied to teamwork. Included topics are group dynamics, problem analysis and problem solving tools, effective communications in a group setting, leadership tools, consensus, and facilitation skills. The course utilizes self-directed and cross functional teams, resulting in a 'teams teaching teams' format. **Prerequisites: PSY 101 or PSY 211 recommended; senior status recommended**

PSY 231 Developmental Psychology **3 Credits**
Introduces theories and principles of development in psychology, emphasizing human socio-emotional and cognitive development from birth to death. (3 lec**) Prerequisite: PSY 101**

PSY 235 Abnormal Psychology **3 Credits**
Examination of the historical and contemporary viewpoints of abnormal behavior. Course includes an in-depth analysis of different disorders, their etiologies, treatment options and symptomology. Integration of the current Diagnostic and Statistical Manual of Mental Disorders' criteria is included. Objectives of the course are implemented through case study analysis and discussion of clinical assessment, diagnosing and treatment modalities. (3 lec) **Prerequisite: PSY 101**

PSY 237 Psychology for First Responders **3 Credits**
Familiarizes students with the mental health crises that are likely to be encountered while working as a first responder. Topics include practical application of crisis de-escalation skills for first responders, mental illnesses and emotional disturbances, referrals to community mental health resources, and self-care for the first responder.

PSY 241 Peer Education **1 Credit**
The Peer Education Class seeks to influence the campus community by engaging students in service projects on and off campus. Peer educators promote health and wellness education by providing programs, events, and other public health initiatives to peers in order to create a more caring, compassionate, and connected campus community. The course provides students with the skills to develop and execute workshops, presentations and awareness events in the college community on topics such as: alcohol, drugs,

academics, stress, diversity, gender issues, health and wellness, relationships, sexuality, body image, sexually transmitted diseases, and others. (2 lec)

PSY 252 Serial Murder **3 Credits**
Introduces and explores the phenomenon of repetitive, intrinsically motivated murder utilizing both clinical and law enforcement perspectives. Primary behavioral and crime scene characteristics of both organized and disorganized types of offenders will be reviewed to explain the incidence of serial homicide as a function of motivational factors ranging from psychopathy to severe psychiatric disturbance. The varied typologies and classification systems for serial murderers will be presented as a means of discussing issues ranging from victim selection to law enforcement investigative responsibilities. The course will rely heavily upon a detailed case study format which will scrutinize the crimes of key selected offenders and allow students to apply theoretical knowledge to particular serial perpetrators. (This is the same as CRJ 252 and can only be taken once for credit).

PSY 253 Psychology of Cults **3 Credits**
Introduces and explores the structure and psychology of totalistic cultic organizations. Students will examine the key differences between conventional religious movements, splinter sects and cults to better understand the differences between varied faith-based organizations. Cults will be viewed both from historical and contemporary viewpoints in regard to recruiting practices, thought reform and control, personal and social consequences of cult membership, and the unique challenges that such groups pose for law enforcement. Additionally, students will review the clinical precursors which may predispose an individual to cultic persuasion and indoctrination, as well as the psychological consequences of membership. The course will rely heavily upon a detailed case study format which will scrutinize selected cult leaders/groups and allow students to apply theoretical knowledge to particular historical events and figures. (This is the same as CRJ 253 and can only be taken once for credit).

RAH 103 Refrigeration and Air Conditioning Lab I **2 Credits**
Applies theories gained from **RAH 113, Refrigeration Components & Physical Principles;**

RAH 123, Refrigeration Systems and Flow Controls; and **RAH 133, RAH Electricity I.** Affords opportunities to fabricate and troubleshoot small commercial refrigeration units in the laboratory environment. 15-week course (6 lab)

RAH 104 Refrigeration and Air Conditioning Lab II **2 Credits**
Expands on the procedures developed in **RAH 103, Refrigeration and Air Conditioning Lab I,** and integrates principles from electrical and refrigeration theory courses **RAH 133 RAH Electricity I; RAH 144 Commercial Refrigeration Systems I;** and **RAH 147 Commercial Refrigeration Systems II.** Students lay out and install commercial refrigeration systems. 15-week course (6 lab) **Prerequisite: RAH 103**

RAH 113 Refrigeration Components and Physical Principles **2.5 Credits**
Introduces the physical principles related to the refrigeration cycle, including pressure, work, power, energy, heat, temperature and the gas laws. The course emphasizes the

infraction of compressor, condensers, evaporators, and metering devices in refrigeration systems. 7.5-week course (8 lec, 0 lab)

RAH 123 Refrigeration Systems and Flow Controls **2.5 Credits**
Continues the focus on refrigeration systems and applications covered in **RAH 113 Refrigeration Components and Physical Principles,** and explores refrigeration system flow controls and pressure enthalpy diagrams and properties of refrigerants 7.5-week course (8 lec) **Prerequisite: RAH 113**

RAH 133 RAH Electricity I **3 Credits**
Studies atomic theory, series, parallel and series-parallel circuits while considering basic A.C. theory, electrical power distribution systems, electric controls, and schematic diagrams. 15-week course (3 lec, 1 lab)

RAH 138 RAH Electricity II and Motors **3 Credits**
Surveys AC Circuits for refrigeration, air conditioning and heating systems and the operation, installation and troubleshooting of the following devices: AC single and three-phase motors and motor starting components, temperature and pressure controls. Additional topics include wire and conduit-sizing and over current protection devices. 15-week course (3 lec, 1 lab) **Prerequisite: RAH 133**

RAH 144 Commercial Refrigeration Systems I **2.5 Credits**
Introduces the specific components that comprise a commercial refrigeration system, including the procedures for refrigeration piping lay-out, sizing calculations, and system troubleshooting. The course also covers the application and installation of the different types of evaporators. 7.5-week course (8 lec) **Prerequisite: RAH 123**

RAH 147 Commercial Refrigeration Systems II **2.5 Credits**
Focuses on the operation and application of condensers and refrigeration heat exchangers and explores the internal construction and operation of reciprocating, screw, and centrifugal compressors and the different methods of compressor lubrication. The course also reviews defrost methods, refrigeration service, and maintenance procedures required to insure an energy efficient system. 7.5-week course (8 lec) **Prerequisite: RAH 144**

RAH 171 HVAC Print Reading **2 Credits**
Introduces drafting and print reading as related to the HVAC industry with special emphasis on residential and light commercial buildings. Course covers architectural and engineering symbols and conventions. (2 lec, 0 lab)

RAH 203 Refrigeration and Air Conditioning Lab III **2 Credits**
Continues refrigeration and electrical troubleshooting skills developed in **RAH 104, RAH Lab II.** Students lay out, install, and service a variety of heat pumps and gas and oil-fired heating equipment. 15-week course (6 lab) **Prerequisite: RAH 104**

RAH 204 Refrigeration and Air Conditioning Lab IV **2 Credits**
Strengthens the troubleshooting skills, knowledge of control circuits, and service techniques from **RAH 103, RAH Lab I; RAH 104, RAH Lab II**; and **RAH 203 RAH Lab III.** In addition, students lay out, install, and operate commercial RAH equipment and control systems. 15-week course (6 lab) **Prerequisite: RAH 203**

RAH 234 RAH Controls I **3 Credits**
Explores controls, diagrams, and circuits found in HVAC and Refrigeration applications. Topics include flame safeguard controls, motor protection, and other electronic control devices. 15-week course (3 lec, 1 lab) **Prerequisite: RAH 138**

RAH 237 RAH Controls II and Transformers **3 Credits**
Studies the construction and operation of HVAC and Refrigeration control systems and transformers. Students develop diagrams, wire and operate laboratory projects using electrical and electronic controls. 15-week course (2 lec, 2 lab) **Prerequisite: RAH 234**

RAH 264 Heat Pump Systems **2 Credits**
Studies the operation and installation of the different types of heat pumps. In addition, the course covers the function of electrical and mechanical components and techniques for servicing heat pumps. 6-week course (8 lec) **Prerequisites: RAH 144 and RAH 147**

RAH 272 Gas Heating Systems **3 Credits**
Focuses on the installation and servicing of gas-fired boilers and furnaces. This course includes the National Propane Gas Association CETP modules to meet education requirements for State of Maine propane and natural gas licenses. 9-week course (8 lec) **Prerequisite: RAH 264**

RAH 283 HVAC Systems I **2.5 Credits**
Studies the operation, troubleshooting and servicing of oil burners and efficiency testing of oil heating systems. In addition, the course provides an overview of the theory, operation, and applications for HVAC systems. The student studies the different types of fans, pumps, duct systems, piping systems and other components found on HVAC systems. 7.5-week course (8 lec) **Prerequisites: RAH 264 and RAH 272**

RAH 287 HVAC Systems II **2.5 Credits**
Builds on RAH 283 HVAC systems I, as it relates to energy efficient operation, maintenance, and troubleshooting of commercial HVAC systems. The student applies the procedures or startup, testing, adjusting, and balancing of air delivery, hydronic piping, heating and cooling systems. In addition, the student is exposed to component layout, system design and psychrometric applications for HVAC systems. 7.5-week course (8 lec) **Prerequisite: RAH 283**

SCI 201 Field Natural History **4 Credits**
An overview of local geology, flora, fauna and core ecological principles of a given region (course may be taken multiple times in different bio-zones). Students will learn basic identification and natural history of local plants including edibles, trees, mammals, alpine, coastal zones or ponds and streams. Students will develop and practice observation,

identification, and interpretation skills using taxonomic keys and field guides and will keep naturalist field journal. Students will also conduct an independent natural history project culminating in a research paper. (40 lec, 40 lab)

SOC 101 Introduction to Sociology **3 Credits**
Examines the major perspectives of sociology. Attention is given to such concepts as society, culture, role, status, institution, social organization, social change, social control, deviance, socialization, and the dialectical relationship between individual and society. (3 lec)

SOC 151 Environment and Society **3 Credits**
Introduces students to the concepts of ecology and ecosystems, the historical roots of the environmental movement, and some of the major environmental philosophies, including sustainable development, environmental economics, deep ecology, as well as the cornucopian view that human ingenuity and technology can overcome, environmental problems. Covers and debates current natural resource issues including air and water quality, population, energy production, food production, fisheries, land use, habitat loss, the impacts of technology, waste disposal and environmental justice. Local, national, and global issues will be covered. (3 lec)

SOC 201 Understanding the Family **3 Credits**
Discusses the family as it impacts the development of young children, examines implications of behavior patterns and explores behavior management techniques which respect the family system. Students will learn skills to facilitate communication and to support families. 15-week course (3 lec) **Prerequisites: ECE 110, SOC 101**

SOC 214 Contemporary Social Problems **3 Credits**
An overview of contemporary social problems focusing on literature of local and global social problems with an effort made to address possible solutions. (3 lec)

SPE 101 Oral Communications **3 Credits**
Emphasizes experiential learning. Topics include audience identification, topic development, purpose recognition, organization and delivery, use of props/visuals/technology, overcoming public speaking fears, and the importance of non-verbal communication and signals. (3 lec)

SUR 105 Introduction to Surgical Technology **7 Credits**
Introduces the broad field of surgical technology and the basic principles of aseptic techniques and patient care. Students will be expected to demonstrate safe and proper application of procedures and use of equipment. (4 lec,6 hrs. clinical) **Prerequisite: Admission to Surgical Technology program**

SUR 114 Surgical Technology I **15 Credits**
Focuses on using basic surgical anatomy, instrumentation and procedural steps in the general surgical, obstetrics gynecology, and orthopedic surgical areas. Takes place in clinical settings. Competence will be assessed for each specialty area. The student

observes surgical procedures and applies his or her classroom knowledge to the clinical situation under supervision. (60 lecture hrs, 540 lab hrs.) **Prerequisite: SUR 105**

SUR 117 Pharmacology for Surgical Technologists **2 Credits**
Includes basic measurements with math review, nomenclature, dosage, and drug calculations. Stresses safe handling procedures for drugs and solutions, principals of drug use and care of surgical patients. Discusses anesthesia, fluids and electrolytes. (2 lec)

SUR 123 Surgical Technology II **16 Credits**
Focuses on using basic surgical anatomy, instrumentation and procedural steps in the genitor-urinary, otolaryngology, eye, plastic and reconstructive, neurosurgery, vascular, and cardiovascular-thoracic areas. Takes place in clinical settings. Competence will be assessed for each specialty area. Students will be assigned to each of the ten surgical services. They will perform scrub and circulating duties at the discretion of the instructors and operating room staff nurses. Students attend both formal and informal classes as well as operating room in-service programs. (90 lecture hrs, 480 lab hrs) **Prerequisite: SUR 114**

TTO 112 Apprenticeship I **12 Credits**
Documents 4,000 hours of apprenticeship training in a registered State of Maine apprenticeship program. Credits are awarded upon documentation of the successfully completed apprenticeship.

TTO 118 Apprenticeship II **18 Credits**
Documents 6,000 hours of apprenticeship training in a registered State of Maine apprenticeship program. Credits are awarded upon documentation of the successfully completed apprenticeship.

TTO 124 Apprenticeship III **24 Credits**
Documents 8,000 hours of apprenticeship training in a registered State of Maine apprenticeship program. Credits are awarded upon documentation of the successfully completed apprenticeship.

WEL 111 Metal Technology **3 Credits**
Offers the student the opportunity to develop skills in recognizing concepts of composition, strength and application of metals, and the reaction of metals to each other. Methods of identifying and utilizing different metals in various welding processes will be stressed. 15-week course. (3 lec) **Prerequisite: Admission to the Welding Program or instructor permission**

WEL 131 Shielded Metal Arc Welding (SMAW), Basic **2 Credits**
Provides the student with the opportunity to develop attitudes in welding safety, skills in arc welding fundamentals, operation of welding machine power sources, and accessories, electrode classification and selection, and welding fillet gauge use. It provides training for skill development necessary to make welds in all positions using E6010 electrodes. An introduction to E7018 low hydrogen electrodes is also included. 4-week course (80 hr.) **Prerequisite: Admission to the Welding Program or instructor permission**

WEL 132 Shielded Metal Arc Welding (SMAW), Advanced I 2 Credits
Provides the student with the opportunity to develop skills making multi-pass fillet welds on inside corner joints. It also provides training to develop the manual skills necessary to make quality stringer and weave beads in all positions using 5/32" diameter E6010 and E7018 electrodes on 3/8" mild steel plate. The safe use of oxygen and acetylene flame cutting equipment using manual operations and techniques is also introduced. 4-week course (80 hr.) **Prerequisite: WEL 131**

WEL 133 Shielded Metal Arc Welding (SMAW), Advanced II 2 Credits
Offers the opportunity to develop skills necessary to produce quality open root single v-groove welds on 3/8" thick mild steel plate. This procedure uses 1/8" diameter E6010 electrodes for the open root pass, 3/32" diameter E7018 electrodes for filler passes and 1/8" diameter E 7018 electrodes for cover passes. The welding positions included are the 2G horizontal, 3G vertical and 4G overhead. Weld quality will be validated utilizing guided bend tests. 3-week course (60 hr.) **Prerequisite: WEL 151**

WEL 134 Shielded Metal Arc Welding (SMAW), Structural 2 Credits
Introduces the student to requirements of the American Welding Society, Structural Welding Code D1.1 and AWS 389 Standard for AWS Certified Welders. The student has the opportunity to develop skills to make quality groove welds on 3/8" thick plate steel with backing strap, using 1/8" diameter E7018 electrodes in the 2G (horizontal), 3G (vertical up), and 4G (overhead positions). 4-week course (80 hr.) **Prerequisite: WEL 132**

WEL 135 Shielded Metal Arc Welding (SMAW), Pipe I 2 Credits
Offers the student the opportunity to develop skills in pipe nomenclature, weld quality, uphill pipe procedures, preheating and inter-pass temperatures. It offers training to develop the manual skills necessary to perform proper joint fit-ups and tacking procedures. It also offers the opportunity to develop skills to produce quality multi-pass welds on five (5) inch diameter, schedule 40, mild steel pipe in the 2G horizontal and 5G vertical up positions, using E6010 electrodes for the open root, fillers, and cover passes. 4-week course (80 hr.) **Prerequisite: WEL 133**

WEL 136 Shielded Metal Arc Welding (SMAW), Pipe II 2 Credits
Offers the student the opportunity to develop skills in pipe welding, determination of weld quality, uphill pipe procedures and applying and maintaining preheat and inter-pass heat treatments. This manual skill development is necessary to produce quality multi-pass welds on 5" diameter, schedule 40, mild steel pipe in the 2G horizontal and 5G vertical up positions using 1/8" diameter E6010 electrodes for the open root, 3/32" E7018 fillers and cover passes. Weld quality will be determined by using the visual and guided bend test. 4-week course (80 hr.) **Prerequisite: WEL 135**

WEL 137 Shielded Metal Arc Welding (SMAW), Pipe III (ASME Qualification) 2 Credits
Offers the student the opportunity to develop the manual skills necessary to produce quality multi-pass welds on 5" diameter, schedule 80, mild steel pipe, using 1/8" E6010 roots and 3/32" E7018 fill and cover passes in the 45degree 6G fixed position. It offers the student training to qualify as a welder in accordance with Section 4, Maine Boiler Rules,

and ASME Boiler and Pressure Vessel Code, Section IX for welder qualifications. 4-week course (80 hr.) **Prerequisite: WEL 136**

WEL 151 Flux-Cored Arc Welding (FCAW) 2 Credits
Provides the student with the opportunity to develop skills using the semi-automatic flux-cored arc welding process. Emphasis on the proper use of semi-automatic equipment, operations, machine adjustments and recognition of weld quality will be introduced. It provides training to develop the manual skills to make quality multi-pass welds in all positions, using 3/8" and 1" thick steel plate. Air carbon arc gouging is also a process that is briefly introduced. 3-week course (60 hr.) **Prerequisite: WEL 134**

WEL 161 Welding Fundamentals 1 Credit
A comprehensive introduction to welding technology and applications. Welding and related tool use safety applications and personal protective equipment (PPE) are demonstrated, practiced and emphasized. Fundamentals of Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW) and Gas Tungsten Arc Welding (GTAW) processes and their applications are introduced, demonstrated and practiced. Cutting processes are introduced and demonstrated. Quality standards and codes are introduced. (15 hr.)

WEL 186 Blueprint Reading and Drafting for Fitters and Welders 3 Credits
Teaches the meanings of views, lines, sizes, dimensions, and welding terms; emphasizes welding symbols and blueprint reading; and develops basic drawing skills by means of practice with these symbols and with basic orthographic projection exercises. (2 lec, 2 lab) **Prerequisite: Admission to the Welding Program or instructor permission**

WEL 222 Quality Assurance/Quality Control 4 Credits
Develops skill in the recognition and application of quality standards in the technical field of welding. Information is presented to explain the relationship between costs and weld quality and the necessary elements that must be considered to develop a quality assurance and quality control program. Development of welding procedures, qualification of procedures, the technical representation of welding discontinuities and defects, and destructive and non-destructive testing are also introduced. 15-week course (90 hr.) **Prerequisite: WEL 111**

WEL 265 Gas Metal Arc Welding (GMAW), Basic 1 Credit
Provides the student with the opportunity to develop skills in welding safety, gas metal arc welding fundamentals, gas metal arc equipment and adjustment, metal transfer and shielding gases. It also provides the student the opportunity to develop the manual skills necessary to make high quality **gas metal arc welds in** all positions on mild steel plate 1/16" to 3/8" thick, single and multipass welds, using the short circuit transfer method using ER 7053 filler wire. 2-week course (40 hr.) **Prerequisite: Admission to the Welding Program or instructor permission**

WEL 267 Gas Metal Arc Welding (GMAW), Advanced 1 Credit
Offers the student the opportunity to develop skills and proper attitudes in welding safety and the gas metal arc welding process of aluminum using 5356 plate and 4043 and 5356

wire. Also covered is the flux core arc welding of stainless steel utilizing E309L-T x .035 or .045 diameter wire. Instruction includes fundamental types of equipment and the basic theory and practice of metal transfer. This course offers training to develop the manual skills necessary to produce quality fillet welds on .125, .250 and .375 thick aluminum, stainless or mild steel plate in all positions. 2-week course (40 hr.) **Prerequisite: WEL 265**

WEL 269 GMAW, Pipe **1 Credit**
Offers the student the opportunity to develop skills in gas metal arc welding of pipe, the proper preparation for welding pipe and the recognition of pipe welding defects. It offers training to develop skills necessary to produce quality groove welds on 6" diameter, schedule 40, mild steel pipe in the 2G, 3G and 6G positions using ER 70-S6 filler wire. 2-week course. (40 hr.) **Prerequisite: WEL 137**

WEL 270 GTAW, Basic **2 Credits**
Offers the student the opportunity to develop attitudes in welding safety and skills in gas tungsten arc welding fundamentals, recognition of arc characteristics and to make quality welds in all positions on 16 and 11-gauge mild steel, stainless steel and aluminum plate. This course reviews the characteristics of mild steel, stainless and aluminum place and includes an introduction to aluminum pipe welding. 3-week course (60 hr.) **Prerequisite: FIT 235**

WEL 277 Gas Tungsten Arc Welding (GTAW), Pipe I **2 Credits**
Offers the student the opportunity to develop skills in the Gas Tungsten Arc Welding process for mild steel pipe. It develops the skills necessary to produce quality open root groove welds, on 5" diameter schedule 80 mild steel pipe in the 2G and 5G positions, walking the cup technique to deposit the root and hot pass, and the SMAW process with E7018 low hydrogen electrodes to complete the weld. An introduction to ER309 stainless steel welding in the 6G position is also presented. Weld quality will be validated using guided bend tests. 5-week course (80 hr.) **Prerequisite: WEL 270**

WEL 278 Gas Tungsten Arc Welding (GTAW), Pipe II **2 Credits**
Offers the student an opportunity to develop skills in the GTAW process for small-diameter mild steel pipe. Training will be offered to produce quality open root, groove welds on 3-inch diameter schedule 40, and 2-inch diameter XX heavy wall mild steel pipe, in the 2G, 5G, and 6G positions. This course also provides the opportunity for skill development in walking the cup technique to deposit the root and hot passes and incorporating the SMAW process with E7018 low hydrogen electrodes for completing the weld. 5-week course (80 hr.) **Prerequisite: WEL 277**

WEL 279 Gas Tungsten Arc Welding (GTAW), Pipe III **2 Credits**
Offers the student the opportunity to develop skills in the Gas Tungsten Arc Welding advanced procedures and preparation for welding stainless steel and aluminum pipe. This course prepares the student to produce quality groove welds on 4" diameter, schedule 5 to 10, and stainless steel pipe in the 2G, 5G, and 6G positions. The identification of pipe welding defects is also included. **Prerequisite: WEL 278**

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Loring Kydd EMCC Faculty Emeritus Deer Isle, Maine	**Greg Leavitt** Bangor Adult Education Bangor, Maine
Darryl Lyon (Chair) Maine Army National Guard Bangor, Maine	**Eric MacDonald** Bangor Housing Authority Bangor, Maine
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Connie Ronco EMCC Faculty Bangor, Maine	**Nicole Stevens** Cross Insurance Bangor, Maine
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Tina Morrell Bangor Federal Credit Union Bangor, Maine	**MyMy Ngyen (Treasurer)** Bar Harbor Bank and Trust Bar Harbor, Maine
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Kathleen Shane Epstein Commercial Real Estate Bangor, Maine	**Kendra Speed** Bangor Savings Bank Bangor, Maine
Kerrie Tripp Bangor Convention & Visitors Center Bangor, Maine	**Scott Welch** Community Member Bangor, Maine
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EMERITUS APPOINTMENTS

Thom Amnotte **1983**
Social Science

Nathaniel J. Crowley, Jr. **1969**
Computer Applications

William H. Dorrity III, posthumously **1991**
Business Management

Joyce Hedlund **EMCC 2012**
President **WCCC 1994**

Loring S. Kydd **1966**
Mathematics

Marilyn A. Lavelle **1990**
Nursing

James Peary **1981**
Refrigeration, Air Conditioning and Heating

Edward Raymaker **1977**
Social Science

Susan Roeder **1981**
Medical Radiography

Warren D. Southworth **1968**
English

W. Gregory Swett **1974**
Dean of Students

Raymond L. Thibodeau **1966**
Dean of Students

Ronald Turner **1986**
Social Science

Janice E. Willette **1977**
Nursing

FULL-TIME FACULTY

Anna Arquette **2012**
Instructor—English
M.A. and B.A. in English, California State University

Armand Auclair **2012**
Instructor—Building Construction
NCCER Certified Building Construction Instructor; Lead Renovators Certificate, EPA Certified Lead Renovator; Repair and Paint Instructor; NCCER Certified Weatherization Technician Instructor

Nancy Bachelder **2018**
Instructor—Nursing
M.S.N, Chamberlain College of Nursing; B.S.N., Chamberlain College of Nursing

Christopher Beaumont **2015**
Instructor— Fire Science Technology
A.A.S. Fire Science Technology, Southern Maine Community College; A.A.S. Business Management, Eastern Maine Community College

Thomas Bickford **2018**
Instructor— Computer Science Technology
M.S. Biomed, Engineering/Telemedicine, University of North Carolina; B.S. Biology, University of Maine, Orono

Troy Blodgett **2016**
Instructor—Building Construction
B.S. in Applied Technical Education, University of Southern Maine; A.A.S. in Building Construction, Southern Maine Technical College

Michael Boyd **2016**
Instructor—Diesel, Truck and Heavy Equipment
B.S. in Applied Technical Education, University of Southern Maine

Pilar Burmeister **2014**
Instructor—Nursing
M.S. in Nursing, Mennonite College of Nursing; B.S. in Nursing, University of Texas; Post-Master's Certificate in Nursing Education, Husson University.

Kimberly J. Campbell **1998**
Instructor—Medical Office Technology
C.A.S. in Leadership in Higher Education, M.Ed. Educational Leadership, University of Maine; B.S. in Business Teacher Education, Husson College

Harold Casey **2010**
Instructor—Computer Systems Technology
M.A. in Educational Leadership, Breyer State University; B.S. in Education, Breyer State University; A+ Certified Technician, Net+ Certified Technician; College State Director – SkillsUSA Maine

Tisha Clark **2016**
Instructor – Surgical Technology
A.S. Nursing, Kennebec Valley Community College; A.A.S. Surgical Technology, Eastern Maine Community College

Roland W. Clukey **1998**
Instructor—Welding
Certified Welding Teacher, Professional Level, State of Maine Department of Education; Federal Nuclear Regulatory Commission Pipe and Structural Certifications; U.S. Navy Structural Certifications; SMAW Structural Certification AWS D1.1; State of Maine Boiler Certification – ASME Section IX, AWS Certified Welding Inspector, AWS Certified Welding Educator

Kathy Crise **2014**
Instructor—Computer Systems Technology
M.A. in Counselor Education, University of Maine; B.S. in Education, University of Maine; A.A.S. in Computer Systems Technology, Eastern Maine Community College; State of Maine Certifications in General Elementary Education, Education Specialist-Guidance Counselor, and Building Administration.

Christopher Davis **2013**
Instructor—Automotive Technology
A.A.S. in Automotive Technology, Eastern Maine Technical College; ASE Master Technician

Jay J. Demers **1998**
Instructor—Culinary Arts and Restaurant and Food Service Management
B.S. in Business Administration, University of Maine; B.S. in Applied Technical Education, University of Southern Maine. Member - Golden Key National Honor Society. Baking and Pastry Arts, Johnson and Wales University. Certified Hospitality Educator, Food Management Professional, Certified in ServSafe

Sanitation, Hospitality Purchasing Management, and Food and Beverage Management.

Christopher M. Easton **2004**
Instructor—Biology
Ph.D. in Biological Sciences, State University of New York; M.S.(R) in Biology, Saint Louis University; B.A. in Biology, Colby College

Lola Ellis **2017**
Instructor—English
M.A. in English, University of Rhode Island; B.A. in English, Bowdoin College

Robert Freeman **1999**
Instructor—Social Science
Ph.D. in Ecology and Environmental Science, University of Maine; M.S. in Resource Economics and Policy, University of Maine; B.A. in Economics and Sociology, Wofford College

Lowell Gardner **2007**
Instructor—Diesel, Truck and Heavy Equipment
Bachelor of University Studies, University of Maine. A.A.S., Automotive Technology, Eastern Maine Technical College. ASE Certified

Cynthia M. Geaghan **2003**
Instructor—Education
M.A. in Special Education, University of Maine; B.S. in Elementary Education, University of Maine at Farmington

Lesley Gillis **2003**
Instructor—English
Ph.D. in English, McGill University; M.A., Case Western Reserve University; B.A., Bates College

Richard J. Gomm **2010**
Instructor—Refrigeration, Air Conditioning and Heating
A.A.S. in Refrigeration, Air Conditioning and Heating, Eastern Maine Technical College; EPA Refrigerant Certification; State of Maine Master Oil License; State of Maine Propane and Natural Gas License; State of Maine Limited Refrigeration Electrical License

William A. Hillery **2003**
Instructor—Mathematics
M.S. in Mathematics, University of New Hampshire; B.S., Eastern Connecticut State University

Terrence Holloway **2012**
Instructor—Business Management
M.S.B., Husson University; B.A. in Business Communications, Pfeiffer University, PHR Certification 2012

Mark Janicki **1993**
Instructor—Hospitality and Tourism Management/Culinary Arts
MBA, Almeda University; B.S. in Education, University of Southern Maine; A.A.S. in Culinary Arts, A.A.S. in Food Service Management, Newbury College; Certificate of Study, La Varennem, Paris, France; Certified Hospitality Educator, Certified in ServSafe Sanitation, Hospitality Purchasing Management; Food and Beverage Management; ACF Charter Member

Jonathan Kill **2012**
Instructor—Automotive Technology
A.A.S GM ASEP Lake Region Community College; ASE Master Technician with L1 Certified Advanced Engine Performance Specialist; Former GM Master Technician with Hybrid System Certification

Melanie Landry **2012**
Instructor—Medical Radiography
B.S. in Elementary and Secondary Education, University of Maine; A.A.S., Medical Radiography, Eastern Maine Community College; AART Certified in Radiography; Maine License in Radiography

Changsu Lee **2003**
Program Coordinator—English Language Learner; Instructor—Mathematics
M.S. in Business, Husson College; B.A. in Political Science, University of Maine at Presque Isle; A.A.S. in Computer Information Systems

Carol Lewandowski **1995**
Instructor—English
M.A. in English, Trenton State College; B.A. in English/Philosophy, Muskingum College; ESL Certificate, Trenton State College

Jane Loxterkamp **2000**
Instructor—Early Childhood Education/Education
M.A. in Early Childhood Special Education, University of Iowa; B.S. in Elementary Education, University of Iowa; Family Specialist Certification, University of Iowa

Heather Magee **2014**
Instructor—Digital Graphic Design
MFA, University of Maine at Orono; B.A., University of Maine at Orono

Lynne Manion **2016**
Instructor – Social Science
Ph.D. History, University of Maine; M.A. Communication/Journalism, University of Maine; B.A. Public Relations and Policy Studies, Syracuse University

Gilbert Marquis **1991**
Instructor—Math/Physics
M.Ed. in Science Education, University of Maine; BSEET, University of Maine; A.A.S. in Electrical Power, Eastern Maine Technical College

Christopher W. Maseychik **2005**
Instructor—Welding
B.S. in Applied Technical Education, University of Southern Maine; A.A.S. in Welding, Eastern Maine Technical College; American Welding Society (AWS) Certified Welding Inspector, Educator, Pipe (ASME IX) & Structural (D1.1) Welding; State of Maine Licensed Welder; State of Connecticut Licensed Piping Journeyman; State of Rhode Island Licensed Journeyman Welder

Debra McIntyre **2017**
Instructor—Human Services
MBA, Husson University; B.S. in Mental Health and Human Services, minor in Addiction Studies, University of Maine at Augusta

Donna McLaughlin **1991**
Clinical Coordinator—Medical Radiography
B.S. in Vocational Education, University of Southern Maine; A.A.S. in Medical Radiography, Eastern Maine Vocational Technical Institute; ARRT Certified in Radiography; Maine License in Radiography

Jeff Melmed **1993**
Instructor—Math/Physics
Ph.D. Physics, University of North Carolina at Chapel Hill; B.S. Physics, B.A. Mathematics, East Stroudsburg University

Heather Merrill **2007**
Program Director—Medical Radiography
M.S. Ed., St. Joseph's College of Maine; B.S. in Radiologic Science, St. Joseph's College of Maine; A.A.S. in Medical Radiography, Eastern Maine Vocational Technical Institute

Sally Metzger **2018**
Instructor— Nursing
M.S.N., Western Govenors University; B.S. Nursing, Western Govenors University

Keith D. Moon **2012**
Instructor—Business Management
J.D., University of New Hampshire; M.B.A., Southern New Hampshire University; B.S., Business Administration, Niagara University

Mark S. Nisbett **1998**
Instructor—Computer Aided Drafting & Design
B.S. in Applied Technical Education, University of Southern Maine; A.A.S. in Drafting Technology, NMVTI; AutoCadd Certified; Member of American Design Drafting Association; Member of Autodesk User Group International

Angela Parks **2014**
Instructor—Medical Assisting
B.A. in Health and Wellness, Ashford University; A.S. in Medical Assisting; CPR/AED/ & BLS Instructor Trainer Certificate; AMT Allied Health Instructor Certificate; CMA Certificate; Lifeguarding/First Aid/CPR/AED Certificate

Mary Ellen Pederson **2013**
Instructor—Nursing
M.S.N. Husson University; M.B.A. Husson College; B.S. Nursing and Biology, Simmons College

Gabriel M. Perrow **2003**
Instructor—Mathematics
M.A. in Mathematics, B.A. in Mathematics, University of Maine

Cornel Plebani **2014**
Instructor—Criminal Justice
M.A. in Forensic Psychology, John Jay College of Criminal Justice; B.A. in Psychology/Sociology, Drew University

Kacie Posuniak **2016**
Instructor—Social Science
M.S. in Clinical Mental Health Counseling, Husson University; B.S. in Psychology, Appalachian State University

Michael Preble **2017**
Instructor – Computer Systems Technology
Certifications: Certified Teacher; Microsoft Trainer, Microsoft Certified Solutions Developer

Deanna Prince **2011**
Instructor—Math/Science
Ph.D. in Marine Bio-Resources, University of Maine; B.A., Zoology, University of New Hampshire

Bruce Randall **2017**
Instructor – Building Construction, Fine Woodworking and Cabinet Making
A.A.S. Building Construction, Eastern Maine Community College; Certificate in Carpentry, United Technologies Center; OSHA 10 Hour Certification

Rick Reardon **2000**
Instructor—Electrical and Automation Technology
M.S. Business, Husson College; B.S. in Electrical Engineering, University of Maine; ISA Level III CCST; Professional Engineer, State of Maine; Master Electrician, State of Maine; Certified FANUC Robotics Instructor; Certified Energy Manager; Certified Lighting Efficiency Professional (CLEP); Diploma GE Field Engineering Program; Diploma USAF School of Applied Aerospace Sciences

Nicole Record **2012**
Instructor—Business Management
J.D., University of Maine; MBA, University of Maine; B.S. in Business Education, Thomas College

Connie Ronco **1999**
Instructor—Early Childhood Education/Education
CAGS in Educational Leadership, University of Maine; M.Ed. in Science Education, University of Maine; B.S. in Child Development, University of Maine

Nathan Scott **2012**
Instructor—Culinary Arts
B.P.S. in Culinary Arts and Service Management, Paul Smith's College; Certification in Food Communications

Stanley P. Siviski **1992**
Instructor—Welding
B.S. in Education, University of Southern Maine; American Welding Society Certified Welding Inspector – QCI 96; Certified Welding Educator; American Society for Nondestructive Testing Certified Level II Inspector MT/PT; Journeyman Ironworker; SMAW and FCAW Structural Certification; AWS D1.1; State of Maine Boiler Certification – ASME Section IX

Connie Springer-Tracy **2013**
Instructor—Nursing
MSN, Nursing, University of Maine, Orono; BSN, Nursing University of Southern Maine; BS Microbiology University of Maine, Orono

Lester Stackpole **1978**
Instructor—Building Construction, Fine Woodworking and Cabinetmaking
B.S. in Vocational Education, University of Southern Maine; Diploma in Building Construction, Southern Maine Vocational Technical Institute; Building Performance Institute (BPI) Building Analyst Professional and Certificate Instructor; Lead Renovator Certificate; O.S.H.A. Certificate; Certified Instructor for Construction Supervisory Training, Associated General Contractors of America

Jon Tierney **2015**
Instructor—Outdoor Recreation and Tourism
B.S. Forest Recreation and Park Management, University of Maine. IFMGA Internationally Certified Guide, AMGA Certified Ski Mountaineering Guide, AMGA Certified Rock Guide, AMGA Certified Alpine Guide, AIARE Avalanche Education Instructor, Critical Care Flight Paramedic

Richard Thomas **2011**
Instructor—Automotive Technology
M.Ed. in Educational Administration, University of Maine; B.S. in Vocational-Technical Education, University of Southern Maine; A.A.S., Automotive Technology, Eastern Maine Vocational Technical Institute

Douglas Towle **2018**
Instructor—Human Services
M.S. Clinical Mental Health, Husson University; A.A., B.A. Christian Ministry, Biblical Studies, Grace Evangelical College

Brent Vadas **2008**
Instructor—Electrical and Automation Technology
B.S., Electrical Engineering Technology, University of Maine at Orono

Charles W. Veilleux **1990**
Instructor—Refrigeration, Air Conditioning and Heating
B.S., Applied Technical Education, University of Southern Maine, State of Maine Limited Refrigeration Electrician's License; EPA Refrigerant Certification; State of Maine Propane and Natural Gas License

ADJUNCT FACULTY

Julie Allen
Instructor—Medical Assistant Technology/Medical Office Technology
Ph.D., Instructional Design and Technology, Keiser University; M.S., Business Administration, Husson University; B.S., Business Administration, University of Phoenix; A.S., Medical Assisting, Washington County Community College; A.S., Office Information Systems, Washington County Community College

Lorrie L. Allen
Instructor—Nursing
M.S., Nursing, University of Arizona; B.S., Nursing, University of Southern Maine

Matthew Allen
Instructor – Social Science

Elizabeth Saucier Atkinson
Instructor—Liberal Studies
M.Ed., Counselor Education, Penn State University; B.A., Psychology & Women's Studies, William Smith College

Priscilla Audette
Instructor—English
M.S., Literature, North Dakota State University; B.S., Political Science, University of California, Los Angeles

Amadou Ba
Instructor – Mathematics
M.A. Economics, University of Maine; MBA, University of Maine; B.S., Agri-Business and Resource Economics, University of Maine

Christian Bailey
Instructor—Criminal Justice
B.S., Criminal Justice, Husson University

Chris Barter
Instructor – English
M.A. English, University of Maine; B.A., English, University of Maine

Frank Bisher
Instructor – English
PhD., English, State University of New York at Buffalo; M.A., English/English Education, Virginia Commonwealth University; B.A. English Literature, Virginia Commonwealth University

Myles M. Block
Instructor—Emergency Medical Services
B.A., Marine Engineering Technology, Maine Maritime Academy;
A.A.S., Emergency Medical Services, Eastern Maine Community College

Melissa Boyan
Instructor – Business Management
MBA, Husson University; MSB, Husson University; B.S., Accounting, Husson University

Valerie Burnett
Instructor—Mathematics
B.A., Mathematics, University of Maine

Howard Carter
Instructor – Electrician's Technology
A.A.S. Electromechanical Technology, Excelsior College

Matthew Carter
Instructor – Humanities
Bachelor of Architecture, Carnegie-Mellon University

Carolyn Coe
Instructor – English
M.A., Draper Interdisciplinary Program in Humanities & Social Thought, Caribbean Literature Concentration, New York University; A.B., English Language and Literature, University of Michigan

Tracy Collins
Instructor – Criminal Justice
J.D. Law, University of Maine; B.A. Journalism, University of Maine

Jesse Cross
Instructor – Social Science
M.S. Clinical Mental Health Counseling, Husson University

Corey Day
Instructor –Criminal Justice
A.S. Legal Technology, University of Maine

Maia Dendinger
Instructor – English
B.A., English, Stetson University; M.A., English, University of Maine

Jane Ellingwood
Instructor—English
M.F.A., Creative Writing, University of Southern Maine; M.A., English, University of Maine; B.A., English, University of Maine

Katie England-Lawler
Instructor – College Success
M.S., College Student Personnel Administration, Canisius College; B.A. Political Science, State University of New York College

Rolf Estela
Instructor—English
ABD, English, University of Colorado; M.A., English, University of Maine;
B.A., English, University of Colorado

Joshua Ewing
Instructor –Criminal Justice
Certificate, Basic Law Enforcement, Maine Criminal Justice Academy; Certificate, Law Enforcement Management & Management, FBI National Academy

Robert E. Fago, Jr.
Instructor—Electrical and Automation Technology
A.S., Electrical and Automation Technology, Eastern Maine Community College

Andrej Favia
Instructor – Mathematics
B.A., Physics, University of Southern Maine; PhD, Physics, University of Maine

Scott Ferden
Instructor—CADD/Fine Woodworking and Cabinet Making
A.S., Computer Aided Drafting & Design, Eastern Maine Community College

Kaylee Folster
Instructor – Criminal Justice
J.D. Law, Roger Williams University; B.A., History/Business, University of Maine

Anne Gabbianelli
Instructor—English
M.Ed., Education/Communications, Bridgewater State University; B.A., Career Writing/Education, Roger Williams University

Leona Gagnon
Instructor – Science
M.S., Biochemistry, University of Maine; B.A., Biology, University of Maine

Alissa Gervais
Instructor – Academic Recovery Course
A.A. Liberal Studies, Eastern Maine Community College

Thomas Giles
Instructor – Welding
A.A.S., Welding Technology, Eastern Maine Technical College; American Welding Society Certified Welding Inspector – QCI 88; American Society for Nondestructive Testing Certified Level II Inspector MT/PT.

Patricia Gillis
Instructor—Social Science
M.A., Liberal Studies, University of Maine; B.S., Business Administration, Husson University

Marilyn Goodwin
Instructor – Business Management
B.A., Accounting and Business Education, Moorhead State University; M.A., Educational Technology

Stacy Green
Instructor – First Year Experience
Bachelor of Applied Science, UMA (Currently Enrolled) A.A.S. in Administrative Assistant, Eastern Maine Technical College

Janis Hamlin
Instructor – English
B.S., Education, University of Maine; M.Ed., Language Arts, University of Maine

Rick Hathaway
Instructor – Electrical and Automation Technology
B.S., Marine Engineering, Maine Maritime Academy

Robert Hawes
Instructor – Social Science
M.S., Counseling and Psychological Services, PhD, Psychology Multidisciplinary Institute for Neuropsychological Development

William Hawkes, Jr.
Instructor – Emergency Medical Services
Licensed EMT, Northern Maine Community College; EMS Instructor, Maine EMS

Judith Hilton
Instructor – Mathematics
M.S., Bioengineering, University of Maine; B.S., Electronics/Instrumentation, University of Maine

Hope Holyoke
Instructor – Business Management
M.S., Business, Husson College; B.S., Business Teacher Education, Husson College

Aaron Hoshide
Instructor – Social Science
PhD, Sustainable Agriculture, University of Maine; M.S., Agricultural Economics, University of Maine; B.A., Earth Science, Wesleyan University

Andrew Hurtt
Instructor – Digital Graphic Design
M.A., Multi-Media, University of Maine; B.F.A., Digital Media, University of Maine

Charles Jacobson
Instructor – Electrician's Technology
Master Electrician

Paul Jones
Instructor – Automotive Technology
ASE Master Auto Technician; Advanced Level Engine Performance Certified; Parts, Diesel Engine & Collision Certified

Cynthia Kelley
Instructor—Early Childhood Education
M. ED., Early Literacy; B.S., Elementary Education, University of Maine

Raymond Kennard
Instructor – Science
PhD., Philosophy, University of Maine; B.S., Chemistry, Ithaca College

Timothy Kennedy
Instructor – Welding
A.A.S., Welding Technology, Eastern Maine Community College

Delia Kenny
Instructor—English
B.A., Studio Art, University of Maine; A.A. Digital Graphic Design, Eastern Maine Community College

Joseph Kingston
Instructor—Social Science
Ed. D., Educational Leadership, Liberty University; CAS, Educational Leadership, University of Maine; M. Ed., Education Reading & Writing Literacy, University of Central Florida; B.S., Elementary Education, University of Central Florida; A.S., Criminal Justice, Palm Beach Community College

Walter Knox, Jr.
Instructor – Electrician's Technology
A.A.S., Electrical Power Technology, Eastern Maine Technical College

Carol Kutz
Instructor—Digital Graphic Design
M.S., Human Development, University of Maine; B.S., Business Management, B.U.S., University of Maine

Andrea LaFlamme
Instructor – Nutrition
M.P.H., Public Health, University of New England; B.S. Human Nutrition, Pre-Med, University of Maine Orono

Kimberly Landrau
Instructor – Social Science
M.S., Clinical Psychology, Walden University

Lawrence Lankhorst, Jr.
Instructor—Science and Medical Office Technology
Doctor of Chiropractic, National College of Health Sciences; B.A., Biology, Keene State College; B.Sc., Human Biology, National College of Health Sciences

Chuck LeBlanc
Instructor – Science
B.A., Natural Science, Saint Anslem College; Dr. of Chiropractic, University of Bridgeport

Megan London
Instructor – Early Childhood Education
M.Ed., Early Intervention, University of Maine; M.A., English, University of Maine; B.A., Honors English, University of Maine

Scott Luciano
Instructor – Fire Science Technology
A.A.S., Fire Science Technology, Southern Maine Community College; Paramedic, Eastern Maine Community College

Daniel Mahoney
Instructor – English
M.F.A., Poetry, University of Massachusetts; B.A., English, California State University

Jeremy Martin
Instructor – Computer Systems Technology
A.A.S., Computer Networking, Eastern Maine Technical College

Jeannie McAlpine
Instructor—Education
M.A., Special Education, New England College

Eileen McAvoy
Instructor – First Year Experience
B.S, Elementary Education, University of Maine

Bruce McLean
Instructor – Math
M.S., Management Information Systems, Lesley College; B.S., Mechanical Engineering Technology, University of Maine

Peter Metcalf
Instructor – Fire Science
Fire Science and Advanced EMT Certificate, Eastern Maine Community College

Eleanor Miller
Instructor—Math
B.A., Mathematics, University of Maine

Lucille Moon
Instructor – Business Management
MBA, Southern New Hampshire University; A.S. Accounting, Daniel Webster College; B.S. Business Management, Daniel Webster College

Casey Murphy
Instructor—Science
M.S.T., Science Education; University of Maine; B.A., Biology, Smith College

Joseph Pakulski
Instructor – Science
PhD., Biology, University of Georgia; M.S., Zoology, University of Georgia; B.S., Biology, University of Maine

Ralph V. Parks
Instructor—English
M.Ed., in T.E.S.O.L., Boston University; B.F.A., Theater, Emerson College

Ann Patterson
Instructor – Social Science
M.Ed., Education, University of Maine; B.S., Education, University of Maine

Nicholas Patterson
Instructor – Social Science
M.F.A., Vermont College of Fine Arts, B.F.A., University of Southern Maine, B.S., Art Education, University of Southern Maine

James Peary
Instructor – Refrigeration, Heating, Air Conditioning Technology
B.S., Industrial Education, University of Southern Maine; A.A.S., Refrigeration, Air Conditioning, Heating, Manchester Vocational Technical College; State of Maine Master Electrician; EPA Refrigerant Certification, Universal – Category; State of Maine Propane and Natural Gas License, HRAI—Residential Mechanical Ventilation Certification

Michael T. Perry
Instructor—English and Social Science
M.A., History, University of Maine; B.A., International Studies, University of Maine at Presque Isle

Ed Peteraf
Instructor – Electrician's Technology
B.S., University of Maine; A.A.S., Eastern Maine Technical College

Matthew Potter
Instructor – Mathematics
M.A., Mathematics, University of Maine Orono; B.S., Mathematics, Lubbock Christian University

Diann Ramsey
Instructor – Social Science
M.S., Psychology, Chicago School of Professional Psychology; B.S., Psychology, Husson University

Ted C. Randall
Instructor—English
M.A., English, University of New Hampshire; B.A., English, Wittenberg University

Ilona Rankin
Instructor – Math
M.S., Accounting and Audit, Odessa State University of Economics; M.S., Chemistry and Teaching, Odessa State University

Jodi Renshaw
Instructor—Digital Graphic Design
A.A., Liberal Arts, University of Maine at Augusta

Jason Richards
Instructor – Criminal Justice
B.S. Criminal Justice, Husson University; B.S., Psychology, Husson University; A.S. Criminal Justice, University of Maine at Augusta

Tracy L. Richardson
Instructor—Business Management
MBA, University of Maine; M.S., Business Administration, Husson University
A.A., Business Administration, Richmond University

Fuoad Saliou-Sully
Instructor – Science
M.S., Biological Engineering, University of Maine; B.S. Biology, University of Maine

Lance Sanborn
Instructor – Fire Science Technology
A.A.S., Fire Science Technology, Southern Maine Community College

Sarah Sawyer
Instructor—Social Science
M.Ed., Counselor Education, University of Maine; B.S., Child Development & Family Relations, University of Maine

Sabrina Sharpe
Instructor—Science
M.S., Biology, Elizabeth City State University; B.S., Biology/Biotechnology, Elizabeth City State University

David Silva
Instructor – Social Science
M.S., Education, Providence College; B.S. Behavioral Science, University of Maine Fort Kent

Kathryn G. Sprague-Cook
Instructor—American Sign Language
M.S., Art Education, Syracuse University; B.A., Fine Arts, Damien College; A.S.L. training at Onondaga Community College

Eric Steeves
Instructor – Social Science
C.A.S., Counseling Supervision, University of Maine; M.Ed., School Counseling, University of Maine; B.A., Social and Behavioral Science, University of South Florida; M.S., Business Management, Husson College

Anne-Marie Stroian
Instructor – Mathematics
M.S. Engineering, Technical University of Civil Engineering, Bucharest, Romania

Matthew Tardie
Instructor – Social Science
M.Ed., Educational Administration, University of Maine; B.A., Political Science, University of Maine

Mike Turcotte
Instructor—Social Science
M.L.A., Leadership & Ethics, Spring Hill College; B.L.A., Organizational Leadership, Xavier University

Kara VanEmmerik
Instructor – Culinary Arts
A.A.S., Culinary Arts, Eastern Maine Community College

Alyssa Vitale
Instructor—Science
M.S., Wildlife Ecology, University of Maine; B.S., Zoology and Ecology & Environmental Sciences, University of Maine

Candace R. Ward
Instructor—Student Success
M.P.A., University of Maine; B.A., History, University of Maine

Annette Weed
Instructor – English
M.A., Education, University of Utah; B.A., English, University of Utah

Brian V. Welsh
Instructor—Liberal Studies
M.S., Human Development, University of Maine; B.U.S., University of Maine; A.S. Law Enforcement, County College of Morris

Greg Westrich
Instructor—English
MFA, Creative Writing, Stonecoast Program of USM; B.S., Education, Ohio State University; B.S., Business Administration, Ohio State University

Jeremy White
Instructor – Mathematics
B.A., Mathematics, University of Maine

Charles Whitney
Instructor – Science
M.S., Environmental Education, Lesley University

Charles Whorton
Instructor – Diesel, Truck and Heavy Equipment
B.S., Vocational Education, University of Southern Maine; A.A., Radiology, Montgomery College; A.A.S., Machine Tool, Eastern Maine Vocational Technical Institute

Robert Woods
Instructor – English, Social Science
M.A. Candidate, History, University of Maine; B.A., History; University of Utah

Helen M. York
Instructor—Social Science
A.B.D., History, University of Maine; M.F.A., Fine Art, Ohio State University; B.F.A., Crafts, Kent State University

STAFF MEMBERS

Academic Affairs

Melissa Boyan **2010**
Senior Administrative Secretary– Academic Affairs Office

Janet Elvidge **2006**
Associate Dean of Library Services

Christina Garneau **2014**
Administrative Specialist II – PTEC

David Hatami **2017**
Associate Academic Dean – Academic Affairs Office

Hope Holyoke **2006**
Regional Director – Early College for ME

Megan London **2018**
Curriculum Designer

Amy Lord **2000**
Administrative Specialist III – KRHEC

Debora Rountree **1997**
Associate Academic Dean for Higher Ed Centers – KRHEC

Elizabeth C. Russell **1994**
Vice President of Academic Affairs

Rhonda Severance **2012**
Senior Office Assistant – Early College for ME

Beth Stoops **2018**
Administrative Specialist II – Nursing

Kara van Emmerik **2015**
Educational Assistant I – Culinary

Cynthia Young **2012**
Associate Librarian, Circulation and Technical Services

Advancement/Business Services

Jennifer Khavari **2016**
Director of Advancement and Business Services

Thomas E. Giles **1989**
Director, Welding Testing Center

Sarah Quirk **2016**
Foundation Accountant

Shaw Weeks **2018**
Business and Workforce Development Coordinator

Business Office

Virginia Ernst **2016**
Accountant II
Jerry Hayman **2015**
Director of Finance
Charles Larson **2016**
Accountant II
Anne Powers **2015**
Accounting Technician
Karen A. Shorette **1994**
Manager of Financial Services

Enrollment Center

Kayleigh Bernosky **2018**
Administrative Specialist I
Luke Bulley **2015**
Financial Aid Counselor
Rita P. Broad **2000**
Associate Director of Admissions
Nancy Burns **1992**
Administrative Secretary
Elizabeth Castro **2005**
Administrative Specialist II
Dan Crocker **1993**
Dean of Enrollment Management & Institutional Research
Lauren Dupee **2018**
Coordinator of Advising and Registration
Darlene Gladu **1999**
Administrative Specialist II
Stacy Green **1996**
Director of Admissions
Amy Guiggey **2015**
Admissions Representative
Kelly Lougee **2017**
Administrative Specialist I
Amy Lunn **2005**
Administrative Specialist III
Eleanor M. Miller **1988**
Database Analyst
Lewis H. Miller **1985**
Assistant Director of Financial Aid

Toby Pelletier **1993**
Administrative Coordinator
Debra Perro **1999**
Administrative Specialist II
Sarah Sawyer **2009**
Director of Advising and Retention
Elizabeth Worden **2003**
Coordinator of Institutional Research and Perkins Grant
Candace Ward **1985**
Associate Dean of Students/Director of Financial Aid

Facilities and Plant Maintenance
Javin Blanchard **2017**
Facilities Maintenance Specialist I
Brad Chesson **2006**
Master Carpenter
Brent Delong **1994**
Facilities Maintenance Specialist II
George Hanson **2015**
Facilities Maintenance Engineer
Daniel Landry **2015**
Facilities Maintenance Specialist I
Roderick Lord **2016**
Facilities Maintenance Specialist I
Michael Lunn **2011**
Electrician II
Nicholas McCarty **2016**
Custodian I
Kathy Roney **2005**
Facilities Maintenance Specialist I
David Sgroi **2009**
Facilities Maintenance Specialist I
David Shumaker **2006**
Custodian III
Nathan Tapley **2013**
HVAC Technician

Human Resources
Chery Fox-Briggs **2002**
Administrative Specialist III
Ruth Doherty **2012**
Director of Public Safety

Jody MacDonald **2011**
Director of Human Resources and Training Manager
Dusty Packard-Adams **1998**
Human Resources and Payroll Coordinator

Information Technology
Eric B. Clark **2003**
Information Systems Support Specialist II
Timothy L. Conroy **1997**
Dean of Communications and Information Technology
Joe Devou **2008**
Information Systems Support Manager
Jeremy Martin **2001**
Information Systems Support Specialist III
Robert Pelletier **2014**
Information Systems Support Specialist III
Christopher Whalen **2008**
Information Systems Support Specialist II

President's Office
Terri Adam **2003**
Special Assistant to the President and the EMCC Foundation
Lisa Larson **2016**
President

Student Services
Elizabeth Saucier Atkinson **2015**
Coordinator of Disability Services
Michelle Bladen **2010**
Administrative Secretary – Student Services and Student Life
Katie England-Lawler **2015**
Director of TRiO Student Support Services
Cheryl Fox-Briggs **2002**
Administrative Specialist III—Student Services and Student Life
Alissa Gervais **2008**
Director of Residential Life, Activities & Student Engagement
Marcie Grant **1997**
Academic Services Coordinator – Student Success Center
Joseph Harris **2016**
Resident Director
Kristopher Kelley **2016**
Resident Director

Salena King Caruso **2013**
Student Support Services Counselor
E.J. Roach **2016**
Dean of Students
Brian Welsh **2016**
Student Navigator
Jeremy White **2018**
TRiO Student Support Services Tutor Coordinator

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